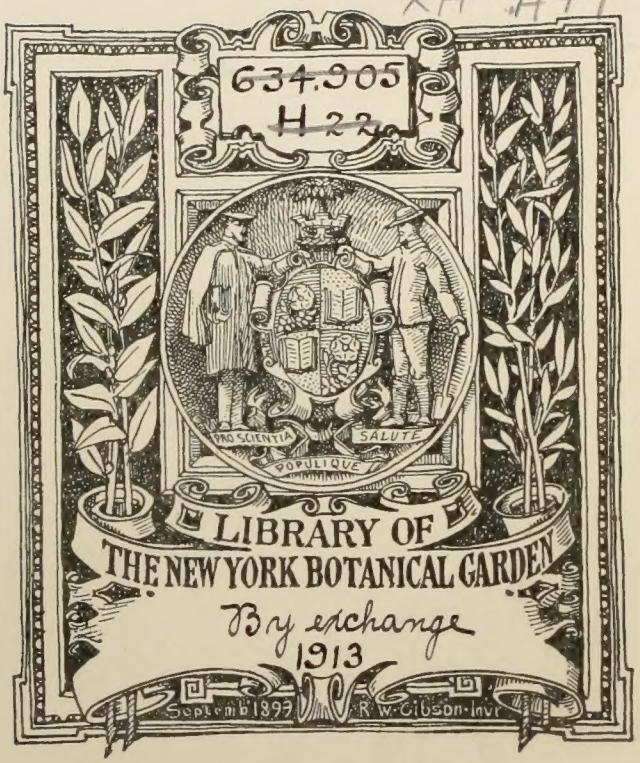
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Hardwood Record

Eighteenth Year, Semi-Monthly.

CHICAGO, APRIL 25, 1913

Subscription $2. Single Copies, 10 Cents.



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ADVERTISERS' CLASSIFIED DIRECTORY FOLLOWS READING MATTER.

Lest You Forget

¶ There's no doubt about it, we are Hardwood Specialists in every possible meaning of the term.

¶ When you are next in need of Hardwood, let us prove what we can do—in quality, price and delivery.

OUR STOCK LIST SHOULD BE ON YOUR DESK—
IF IT ISN'T, A POSTAL WILL BRING IT.

J. GIBSON McILVAIN & CO.

1420 Chestnut Street **Philadelphia, Pa.**

HOLLOWAY HARDWOODS

The following Stock is band-sawn and runs

60% 14′ and 16′

1 car 5/4″ x 11″ & wider 1s & 2s Plain Red Oak

10 cars 4/4″ x 6″ to 12″ 1s & 2s Cottonwood

5 cars 4/4″ x 13″ and wider 1s & 2s Cottonwood

6 cars 4/4″ No. 1 Common Cottonwood

Holloway Hardwood Lumber Co.
20 W. Jackson Blvd. Chicago

Cartier-Holland Lumber Company

SPECIAL WHITE FURNITURE STOCK

We offer the following winter sawed high-grade End Cured White Maple. Same will be in shipping condition during May and June. Get your inquiry to us at once.

120,000 feet one-inch End Cured White Maple.

35,000 feet two-inch End Cured White Maple.

DROP US A LINE NOW SO YOU WILL NOT FORGET IT

Ludington Michigan

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

BASSWOOD

We Offer for Prompt Shipment

150,000 Feet

Dry 1 x 7 and wider Basswood Firsts and Seconds. Run about 75% clear, the defects are small and the stock is very bright and nice.

ESTIMATED WIDTHS

7 and 8 inch	34%
9 and 10 inch	35%
11 and 12 inch	27%
Wider than 12 inch	4%

ESTIMATED LENGTHS

6 and 8 feet	8%
10 and 12 feet	20%
14 feet	20%
16 feet	49%
Odd lengths	3%

April 10, 1913

COBBS & MITCHELL, Inc.

Sales Department

CADILLAC MICH.

Mitchell Brothers Co.

Sales Department

Cadillac, Mich. **April 10, 1913**

Dry Michigan Hardwoods

1x4 Basswood No. 1 Common	11 M
4/4 Cadillac Gray Elm 1s & 2s	25 M
1x6 Maple 1s & 2s	21 M
1x9 Maple 1s & 2s	16 M
4/4 White Maple, End Dried	16 M
5/4 White Maple, End Dried	4 M
4/4 Birdseye Maple, End Dried	3 M
4/4 Soft Maple, No. 2 Common & Better	9 M

WE MANUFACTURE A SPECIAL GRADE OF HARDWOOD FLOORING FOR FACTORY FLOORS

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

100,000 ft. 5/4 1st & 2nds Basswood

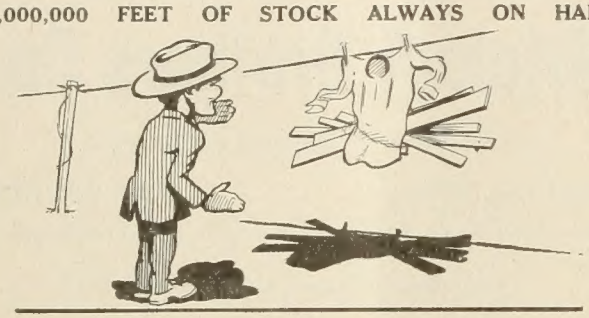
All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

15,000,000 FEET OF STOCK ALWAYS ON HAND



A Shirt Tail-Full of Lumber

is no place to look for your requirements. We manufacture **40,000,000 feet ANNUALLY** of band sawn Southern Hardwoods. Our lumber is Full Thickness, is of fine average widths and lengths, and we make strictly high grades.

"WISLUMBCO STANDARDS"

100,000 ft. 4/4 x 13 to 17" Box Board Cottonwood.
50,000 ft. 4/4 x 9 to 12" Box Board Cottonwood.
100,000 ft. 4/4 x 13" & wider 1st & 2d Cottonwood.
75,000 ft. 4/4 No. 1 Common Cottonwood.
100,000 ft. 4/4 No. 1 Shop Cypress.
100,000 ft. 4/4 No. 1 Barn Cypress.
50,000 ft. 4/4 x 6 to 13" 1st & 2d Sap Gum.
75,000 ft. 4/4 1st & 2d Red Gum.
100,000 ft. 4/4 No. 1 Common Red Gum.
50,000 ft. 6/4 Log Run Soft Maple.
50,000 ft. 4/4 1st & 2nd Plain White Oak.
25,000 ft. 5/4 1st & 2d Plain White Oak.
30,000 ft. 5/4 No. 1 Common Plain White Oak.
100,000 ft. 4/4 x 13 to 17" Box Board Tupelo.
100,000 ft. 4/4 x 6 to 12" 1st & 2d Tupelo.

WISCONSIN LUMBER COMPANY
Mills: Huttig, Ark. Deering, Mo. Chicago

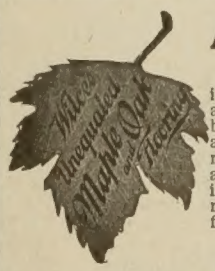
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VENEERED PANELS
ALL WOODS
SEND FOR STOCK LIST
MAHOGANY LUMBER
CARROLL AVE. AND SHELDON ST.
CHICAGO

Estabrook-Skeele Lumber Co.

MANUFACTURERS AND DEALERS IN
Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood
WRITE US BEFORE SELLING

Fisher Building, - - - CHICAGO
'PHONE HARRISON 1984



A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTHWEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry
Room 1003 Harris Trust Bldg., Chicago, Illinois

SAVE YOUR MONEY BY USING THE

RED BOOK Published Semi-annually in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the **United States, Alberta, Manitoba and Saskatchewan.** The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. **Write for terms.**

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St. CHICAGO — Mention This Paper. — 116 Nassau Street NEW YORK CITY

Both Ends and the Middle

HARDWOOD RECORD reaches most everybody who produces markets and consumes Hardwoods.

Nothing But Hardwoods

Louisville, a Real Gateway

The floods which were recorded in the Ohio Valley a few weeks ago have made one point extremely clear to the lumbermen of the country, and that is that Louisville is in truth and in deed the Gateway to the South.

For a considerable period the only way by which goods could be moved into the South, and from the South into the territory north of the Ohio river, was by Louisville.

Not only was traffic moved through this city, as under normal conditions, because of the splendid geographical position which it occupies, but under the stress of storm and flood Louisville was the last to be seriously impeded and the first to recover full possession of traffic facilities.

There is a corollary, an implication, a deduction, or what you will, to be drawn from this: and that is that the same conditions which maintain Louisville as the natural gateway for traffic during flood season, make it the ideal gateway for the movement of hardwood lumber under all conditions.

The Louisville Hardwood Club

W. P. BROWN & SONS LUMBER CO.
OHIO RIVER SAWMILL COMPANY
LOUISVILLE POINT LUMBER CO.
EDWARD L. DAVIS LUMBER COMPANY
NORMAN LUMBER COMPANY
Mills and Sales Office: Holly Ridge, La.
BOOKER-CECIL COMPANY
THE LOUISVILLE VENEER MILLS

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO.

KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK

OUR SPECIALTY

MANUFACTURERS OF

QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER

BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

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HARDWOODS AND PINE

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Main Office and Yards: Knoxville

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We Want Orders for the following Dry Stock:

WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT — BASSWOOD

POPLAR — WHITE PINE

Always carry large well assorted stock of all kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

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Yard: Middlebrook Pike and Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR, OAK, CHESTNUT, WHITE AND YELLOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

Kimball & Kopcke

Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

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Red Birch

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

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THE GATEWAY OF THE SOUTH

L. W. RADINA & CO.
DEALERS IN
POPLAR AND HARDWOODS
CINCINNATI : : OHIO

BENNETT & WITTE
10 cars 4/4 No. 1 Common Plain Red Oak
5 cars 4/4 No. 1 Common Plain White Oak
5 cars 5/8 1sts and 2ds Sap Gum.
10 cars 3/4 1sts and 2ds Sap Gum
20 cars 4/4 1sts and 2ds Red Gum.
10 cars 4/4 No. 1 Common Red Gum.
1 car 3″ Plain White Oak, 1sts and 2ds.

Main Office CINCINNATI, OHIO
SOUTHERN OFFICE, MEMPHIS, TENN.
EXPORT OFFICE, NEW ORLEANS, LA.

W. E. HEYSER, President WEAVER HASS, V. President
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Winton Place
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West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Grade West Virginia and Southern Hardwoods in stock at all times.

Shipments made direct from our own yards and mills in straight or mixed cars.

SEND US YOUR INQUIRIES

THE MOWBRAY & ROBINSON CO.
CINCINNATI, OHIO

We Want to Move Quick

1″ No. 1 Com. Poplar
1¼″ No. 1 Com. Poplar
1½″ No. 1 Com. Poplar
1″ Sap & Select Poplar
1½″ Sap & Select Poplar
2″ Sap & Select Poplar
2″ No. 1 Common White Ash

WILL MAKE LOW PRICES TO MOVE QUICK

WE WANT TO BUY
1″, 1¼″, 1½″ 1s & 2s AND NO. 1 COMMON SAP GUM
1″, 1½″ & 2″ 1s & 2s AND NO. 1 COMMON RED GUM
1″ NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
WITH BEST CASH PRICES

DUHLMEIER BROS.
CINCINNATI, OHIO

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of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

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Veneers, Mahogany and Hardwood Lumber
Largest Stocks Best Selections
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MEMBER HARDWOOD MANUFACTURERS ASSOCIATION OF THE U.S. — A Guarantee of a Square Deal in both Grade and Measurement

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CHARLESTON, MISS.

THE LARGEST HARDWOOD MILL IN THE WORLD—ANNUAL CAPACITY 40,000,000

We Produce Kraetzer-cured LUMBER

STOCK LIST—Dry Lumber on Hand April 1, 1913

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	12/4	16/4
FAS Quartered White Oak		25,000					6,000			
FAS Quartered White Oak 10" & up					12,000					
No. 1 Com. Quartered White Oak				20,000	150,000					
No. 2 Com. Quartered White Oak					12,000					
FAS Plain White Oak		25,000	20,000		50,000		20,000			2,000
FAS Plain White Oak 10" & up				4,000						
No. 1 Com. Plain White Oak			25,000	20,000	300,000	12,000	20,000			
FAS Plain Red Oak			20,000		100,000			20,000		1,000
No. 1 Com. Plain Red Oak			20,000	15,000	30,000					
Com. & Better Qrtd. Red Gum					25,000			1,000		
FAS Circassian Red Gum	25,000	25,000	12,000	30,000	30,000	3,000	4,000	6,000		
FAS Plain Red Gum	500,000	400,000	40,000	400,000	600,000	100,000	75,000	60,000	3,000	
No. 1 Com. Plain Red Gum	100,000	75,000	60,000	75,000	300,000	60,000	20,000			
FAS Sap Gum 13"-16"					60,000					
FAS Sap Gum 18" & up					15,000					
FAS Sap Gum 6" & up	30,000					15,000	20,000			
No. 1 Com. Sap Gum 4" & up					250,000		15,000			
No. 2 Com. Sap Gum 4" & up	80,000	100,000		35,000						
Shop & Better Cypress					100,000		200,000	20,000		
Com. & Better Tupelo					100,000					

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% OF 14 & 16 FT. LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS & BRIDGE PLANK—FACILITIES FOR KILN-DRYING & DRESSING

GOOD GRADES "STEARNS QUALITY LUDINGTON" PROMPT SERVICE

HARDWOOD SPECIALISTS

When you look over our HARD MAPLE you know the reason why they specify the

STEARNS BRAND

Why should you load up with a large stock when we carry the assortment here and can ship promptly when you need it? Just try out the

STEARNS SERVICE



Some of Our Maple Lumber

A Few Items to Spare:

5 cars 4/4 No. 1 Com. & Better Saps
3 cars 8/4 No. 1 Com. & Better Saps.
1 car 8/4 1s & 2s Step Plank.
3 cars 4/4 End Dried White.
2 cars 5/4 End Dried White.
1 car 4/4, 5/4, 6/4 and 8/4 Birdseye.
2 cars 12/4 1s & 2s.
1 car 10/4 1s & 2s.
1 car 6/4 1s & 2s.
1 car 5/4 1s & 2s.
2 cars 8/4 No. 1 Com, 6" & wider.
1 car 6/4 No. 1 Com, 6" & wider.
2 cars 5/4 No. 1 Com, 7" & wider.

The STEARNS SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

OAK—Plain and Quartered, Red and White

COTTONWOOD—Ash, Southern Elm, Gum, Soft Maple

A FEW ITEMS WE WANT TO MOVE:

100,000 Ft. 4/4" x 18" to 21" 1st & 2nds Cottonwood.
150,000 Ft. 4/4" x 9" to 12" Cottonwood Box Boards.
50,000 Ft. 5/4" x 13" to 17" 1st & 2nds Cottonwood.
75,000 Ft. 3/8" 1st & 2nds Red Gum.
41,000 Ft. 1/2" 1st & 2nds Red Gum.
44,000 Ft. 5/8" 1st & 2nds Red Gum.
86,000 Ft. 3/4" 1st & 2nds Red Gum.
110,000 Ft. 4/4" 1st & 2nds Red Gum.
120,000 Ft. 5/8" 1st & 2nds Sap Gum.
85,000 Ft. 3/4" 1st & 2nds Sap Gum.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY
HARDWOOD LUMBER **Memphis, Tenn.**

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Cherokee Lumber Co.

For the next thirty days we want to move Quartered White Oak and Chestnut and would appreciate your inquiries for attractive prices.

NASHVILLE, TENN.

SECURE BETTER PRICES

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

ASK US ABOUT IT

We will name very attractive prices on a few cars of each of the following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4/4 and 8/4 Sap Poplar.
1¼", 1½" and 2½" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23" and 24" and up.
4/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

THE EAST

BOSTON NEW YORK PHILADELPHIA

WM. WHITMER & SONS
INCORPORATED

Manufacturers and Wholesalers of All Kinds of

"If Anybody Can, We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg. PHILADELPHIA

Willson Bros. Lumber Co.

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141 MILK STREET, BOSTON, MASS.

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Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

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1829 Land Title Building, PHILADELPHIA, PA.

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Birch, Maple and Beech

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AMERICAN LUMBER & MANUFACTURING COMPANY

"Old-fashioned" Soft Cork White Pine
"Idaho" White Pine
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Also Yellow Pine and Hardwoods

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Plans and specifications prepared. Construction supervised. First class heavy millwright work. Entire plants surveyed. Machinery for complete mills. Fire loss adjustments. Practical sawmill engineer. Can save you money. Highest testimonials.

C. M. STEINMETZ, P. O. Box 83, Washington, D. C.

H. D. WIGGIN

89 STATE STREET
BOSTON, MASS.

MANUFACTURER HARDWOOD LUMBER

Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple

Mill at Stone Coal Junction, West Virginia

PROCTOR VENEER DRYER FIREPROOF

—AN—

UNPARALLELED SUCCESS

No Splitting Nor Checking

No Clogging Nor Adjusting



Recommended by all those who have tried it

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DEPT. L HANCOCK & SOMERSET STS. PHILA., PA.

If You Knew

What our BULLETIN SERVICE was doing for your competitor in the lumber business, you'd not only want the service yourself, but YOU'D HAVE IT.

Let Us Tell You About It.

Hardwood Record :: Chicago

THE EAST

LEADING MANUFACTURERS AND JOBBERS

W. P. Craig Lumber Co.

Wholesale Hardwood and Building Lumber

Empire Building, :: PITTSBURG, PA.

HARD MAPLE

When the quality of being hard is required in Maple, Vermont or Adirondack stock should be specified. Maple will not grow harder for us than other people, but it certainly does grow harder in this section of the country than elsewhere.

WE CAN MAKE PROMPT SHIPMENTS.

GEO. WEBSTER LUMBER CO.
21 Besse Place, Springfield, Mass.

Oak Bridge Plank cut to order
for QUICK SHIPMENT
WRITE FOR PRICES
J. S. KENT COMPANY PHILADELPHIA

For Quick Shipment
1 car 4 4 1s and 2s Chestnut.
2 cars 4 4 No. 1 Common Chestnut.
1 car 4 4 1s and 2s Red Oak, 16" and up wide.
1 car 4 4 Common and Better Quarter Sawed Red Oak.
Inquiries Promptly Answered
DANIEL B. CURLL, REAL ESTATE TRUST BLDG., PHILADELPHIA, PENNA.

PALMER & PARKER CO.
TEAK ENGLISH OAK CIRCASSIAN WALNUT
MAHOGANY VENEERS
EBONY DOMESTIC HARDWOODS
103 Medford Street, Charlestown Dist. BOSTON, MASS.

J. & J. VINKE
Agents for the Sale of
AMERICAN HARDWOODS IN LUMBER AND LOGS
AMSTERDAM, HOLLAND

WISTAR, UNDERHILL & NIXON
REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.
QUARTERED WHITE OAK
NICE FLAKY STUFF

LET us talk to you about the plain and quartered oak that made Indiana famous. It's the kind we make to-day.

Wood-Mosaic Co., New Albany, Ind.

We Know How to fill your orders for all kinds of HARDWOODS, WHITE PINE, YELLOW PINE, SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.
Give us a trial.
THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

R.E. Wood Lumber Company

¶ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.
¶ We own our own stumpage and operate our own mills.
¶ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES: CONTINENTAL BUILDING.

Baltimore, Maryland

POPLAR

4/4 to 12/4, All Grades
We also manufacture Oak and Gum

If you appreciate quality and service, we will hold your business

Faust Bros. Lumber Co.
SALES OFFICE: CHICAGO, ILL.
MAIN OFFICE: PADUCAH, KY.

POPLAR LUMBER

4 cars Poplar Box Boards, 10" to 12" wide.
2 cars 4/4" Sap Poplar, 6" and up wide.
12,000' 3/8" Sap Poplar, 6" and up wide.
11,500' 1/2" Sap Poplar, 6" and up wide.
5 cars 4/4" Panel & No. 1 Poplar, 18/23" wide.
5 cars 4/4" 1s and 2s Poplar, 7/17" wide.
5 cars 4/4" Sap Poplar, 6/12" wide.
2 cars 6/4" Sap Poplar, 6/12" wide.
1 car 8/4" Sap Poplar, 6/12" wide.

RUSSE & BURGESS, Inc.
Memphis, Tennessee

E. F. PERRY, Manager — LOUIS H. PARKER, Asst. Manager
ESTABLISHED 1892

Lumber Underwriters

Every Kind and Form of

FIRE INSURANCE

FOR LUMBERMEN

66 Broadway — New York

OAK FLOORING

Kiln-Dried
Polished

HARDWOOD LUMBER
OAK FLOORING — BOX SHOOKS
CARRIER LUMBER & MFG. CO.
SARDIS MISS.
BENT WOODWORK — ROTARY CUT VENEER

Hollow Backed and Bundled

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Hardwood Record



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Review and Outlook

General Market Conditions

THE DEMORALIZATION of the hardwood manufacturing and consuming industries resulting from the floods and general high waters immediately prior to the last issue of HARDWOOD RECORD is now practically a thing of the past. By Herculean efforts the various sawmills, yards and remanufacturing factories in the flooded area have straightened up their shops and their lumber piles and have gotten their operations into smooth running order again.

The extent of the flood in the Mississippi valley was a pleasant disappointment to hardwood manufacturers in that territory. It was confidently predicted while the Mississippi was rising that the extent of and resultant damage from the flood would surpass by far that of last year. However, while in most places the high water surpassed that of the last serious flood, its detrimental effects upon the lumber business were nowhere near those affected a year ago.

In the first place, the breaks in the Arkansas levee section were not so serious as before and as a result the area flooded was not so extensive. Furthermore, profiting by previous experience, sawmill operators wherever possible removed every stick of lumber that they could ship or find a dry place for; consequently there is a comparatively small percentage of flooded stock to be marketed this year. The damage in the previous flood was not so much from actual loss of lumber as it was from the degrading of stock due to its being immersed and covered with sand and silt. In this year's flood most of the big manufacturers anticipated the high water long enough ahead to either load their stock on cars for shipment to distant points or remove it to high ground. While the expense of this extra operation was, of course, enormous, still it is inconsequential as compared to the loss that would have resulted if the lumber had been flooded.

There is, however, one feature which, while it does not seem to have assumed the importance given to it by some lumbermen, has unquestionably had some effect upon general market conditions,—namely, in order to remove as much lumber as possible from the reach of the high water, the sawmill men shipped large quantities of their stock to various distributing points either in advance of or in anticipation of orders. When the latter condition prevailed, they necessarily were forced to concentrate their efforts on the sale of this stock in the territory to which it was shipped and undoubtedly a good deal of such lumber was taken up by large buyers at bargain prices. It may be that the slight easing off in demand which is spoken of in some quarters at present can be traced at least partially to this cause.

The basis of the lumber business on the whole, however, is unquestionably firm. While, as stated, the average run of orders is not as urgent as it was a few weeks ago, still this condition can be accounted for in other ways than by the supposition that the supply exceeds the demand. The firmness with which the market is holding throughout the country is pretty conclusive proof that there is no excess of dry lumber at any point. The benefits to the lumber trade resulting from the floods are being felt more directly now than immediately after the recession of the water. Calls for immense quantities of stock are coming in from those middlewestern states most affected and, while it is true that the distributing centers in that territory are taking care of the bulk of the business, still this work will have a favorable effect upon the entire trade as it will remove from the general market the stock going into rebuilding and repairs in that section. The wholesale element is still reporting extreme difficulty in securing anywhere near the amount of dry lumber that it can use. In fact, a number of wholesale houses, which under ordinary circumstances are rushed to take care of the business, are now practically compelled to loaf on their jobs simply because there is no lumber with which to do business.

It is anticipated that during the next few weeks considerable quantities of northern hardwoods of the winter's cut will be shipped. In fact, several cargoes have already been received at lake points, but they have been mainly of basswood, the maple and birch not yet being ready for shipment.

One feature of the general situation which is extremely encouraging is the report of unusually extensive building operations coming from almost every important city in the Middle West. The building trades are now opening up in good shape, and in addition a large amount of work which has been going on during the winter is now being finished up and is ready for furnishing. Thus, there is a stimulated demand, not only for general lines of building material, but also for furniture.

The relative positions of the various important hardwoods of the country, which have prevailed for some time, are still being maintained with the exception of wide poplar which seems to be improving steadily in value and demand.

Summarizing, while the buying trade generally is showing some little hesitancy about placing large orders ahead on contract, it is safe to say that this policy is based on a belief that the northern cut is larger than it really is, and on the further fact that probably the large amount of southern stock shipped from flooded territory as suggested above has resulted in stocking up at some points. Undeniably there is some little hesitancy in all business lines, due to tariff discussion at Washington, but the business element of the country seems to be almost uniformly of the opinion

that there is no fundamental reason for fearing any serious results from the proposed tariff legislation. As to the lumber business itself, while it may require a slightly greater effort to market stock in the next few months and while pick-up orders will not be so common as recently, still there will not be any great difficulty in finding buyers for all hardwood lumber for sale for some months ahead and at prices equal to and in some cases greater than present prevailing values.

The Lessons of Arbor Day

THE OBSERVATION OF ARBOR DAY is not a national affair, though it is nation-wide. Each state sets its own time and celebrates the occasion after its own fashion, though all conform to the same general plan. Texas and Alabama have made February 22 their tree day; Florida is still earlier and does the work in January; Georgia in December; New Mexico in March; Nebraska on April 22, which is the birthday of J. Sterling Morton, who is by some considered the father of the Arbor day idea. West Virginia has two tree days yearly, one in the spring, the other in the fall.

Various trade associations, dating from more than a century ago down to recent years, have advocated tree planting for commercial purposes. One of the most important of these periods of agitation occurred about a hundred years ago, and the principal work advocated was the planting of white oak to insure a supply of staves for the future. Little actual planting was done.

The real education of the American people to the necessities of forestry, particularly for the purpose of protecting soil against erosion and watercourses against floods and water failure, dates from 1864, when George P. Marsh published his book "Man and Nature." He was a remarkable scholar, an extensive traveler, and his work in the diplomatic service of the government, during which he spent much time in Greece, Turkey, Italy and other countries of South Europe, gave him an opportunity to study the deplorable results of deforestation. He noted numerous instances of splendid regions which had been ruined in historic time. He began the work which Bailey Willis has greatly extended since by carrying the investigations across Asia to China.

The writings of Marsh led to many of the results which others have worked out. J. Sterling Morton, Commissioner of Agriculture, popularized the movement by bringing it directly home to the people who needed trees. The work began in the place where it was proper that it should begin, on the treeless plains. Mr. Morton lived in Nebraska, and the Nebraskans became the most industrious tree planters of the country. The movement spread quickly to surrounding regions, and it is said that a million trees were planted in a single year as a direct result of Mr. Morton's pioneer work. The movement soon took hold of public schools, and in a few years Arbor days were regularly instituted in all the states, except two or three.

The chief object held in view by those who conduct Arbor day exercises is the beautifying of school grounds. The results are visible everywhere, but more particularly in the country, villages and small towns. There is less opportunity to make a showing in cities. The bare and cheerless school house yard has been changed into a thing of beauty which now inspires, though it formerly appalled. It now appeals to children in a way to leave lasting impressions. It is remarkable how great a change a few trees will make in a school yard.

The final results of this educational work will be seen in the future. Tree planting on school grounds and by roadsides is in itself a good thing, but very much must be done beyond this. The movement must spread until it includes the whole country—the mountains and plains as well as the yard and roadside. The wild forests are passing. They are not yet gone, and some of them will last a long time, much longer than people generally suppose; but, nevertheless, the time is now at hand when the lessons of Arbor day must be applied on a vast scale. Shade trees cannot furnish lumber for the people of this country, and planting must enlarge its scope to include timber for future markets.

The influence of Arbor day in the schools is beginning to bear fruit, and will increase. The children will carry their tree-planting ideas into the business world, and this will work as leaven in the enlargement of favorable public opinion. The growing sentiment in favor of forest conservation is doubtless due, to a large extent, to beginnings made in Arbor day exercises at country and village schools. As the child grows, the ideas enlarge and attain their fruition in the mature business man who is able to transform ideas into accomplishments.

Car Surplus and Shortage April 15

ACCORDING TO THE LATEST REPORT of the American Railway Association, the total surplus of freight cars in the country on April 15 was 70,715, as compared to surplus of 68,792 on April 1. The total shortage on April 15 was 13,217 cars, and on April 1 was 10,804 cars. These figures show shipments to be steady in volume.

General Grant's Living Monument

IN THE NORTHEAST CORNER OF WASHINGTON PARK, Chicago, near Cottage Grove avenue and Fifty-first street, is a white elm (*ulmus americana*), about two feet in diameter, which was planted Tuesday, November 18, 1879, by Gen. Ulysses S. Grant during his stop in Chicago as he was completing his trip around the world.

The occasion was of great importance at the time, but it has so nearly faded from the memory of most persons who now see the tree and the stone near it which gives the date and fact, that few can recall what was going on in Chicago at that time. This illustrates the truth that current events quickly fade from memory, and unless preserved by written history they are soon lost.

General Grant arrived in Chicago from San Francisco November 12, and was welcomed by booming cannon and committees of various kinds. His tour round the world had been one grand triumphal procession, and it was planned to end it in Chicago with the greatest demonstration of all. The plan was carried out to the letter. In addition to the city's population, there were 300,000 visitors present to join in the welcome. Some of the most noted personages in the country were in Chicago to see and take part in the celebration.

General Grant remained in the city eight days, and every day was crowded full of demonstrations, receptions, and parades. The newspapers in some other cities accused Chicago of having gone mad over Grant; and the socialists of the city voiced their protest by holding a mass meeting at which violent resolutions were adopted, and Chicago was warned, in thinly-veiled language, that it was leading a movement, the purpose of which was to seat Grant on a kingly throne as ruler of this country. One of the city officials drew censure upon himself by referring to the fact that Washington had refused to accept a crown when it was offered. On November 18—the day the elm was planted—General Grant was given a reception by 50,000 school children.

The point of it all is that great demonstrations are soon forgotten. The most lasting thing connected with Grant's eight-day stop in Chicago, on his return from the circumnavigation of the globe, is the elm tree in Washington park. That is the monument which has endured while nearly all else has passed from the memory of the living.

The remarkable thing of it is that in the scores of columns of newspaper accounts of Grant's visit, not one line occurs—at least in some of the papers—concerning the planting of the tree. There were thousands of paragraphs in the write-ups giving accounts of almost every conceivable thing connected with the celebration, even descriptions of children's hats and the buckles on horses' harness, but the most important thing of all, the elm, was not considered worth mentioning.

The elm has grown to a diameter of about two feet in thirty-three years. It is healthy and vigorous, and, barring accidents, it ought to grow for three hundred years and reach a diameter of six or seven feet and a height of a hundred or more. Planted

elms less than two hundreds years old in New England have reached sizes that great; Illinois' climate should produce larger trees. It is, therefore, not unreasonable to claim that the most durable monument commemorating Grant's visit to Chicago—on his trip round the world—is the elm in Washington Park.

Free Trade in Lumber

THE PROPOSED CHANGE IN THE TARIFF, by which lumber will be placed on the free list, has for its purpose, as announced by its authors, cheaper lumber for the consumer and conservation of forest resources by bringing in foreign wood and cutting less of our own timber. If it accomplishes either or both of these objects it will cut into the lumber business in the United States by transfering activities to foreign countries at the expense of home industries. It is doubtful, however, whether free lumber would accomplish either purpose.

The lumber business is so large in this country, and so small in others that can compete, that the proposed change cannot much affect trade. Canada is the country which is expected to furnish the free lumber. No one is disposed to consider other countries as sources of supply in this connection. While lumbermen in the United States are trying to figure out where they are to be hurt, the Canadians are equally busy figuring how they will be helped. The most that the Canadians can see in it is a chance —if it really is a chance—to ship some low-grade stuff across the line; but it is doubtful if even that can be done except locally and on a small scale.

Canadian timber is not the enormous resource it is generally supposed to be. Forests there are much below those of the United States, and the annual lumber cut is much smaller. It costs about the same to cut it, probably a little more to market it, and operators there have no advantage over those this side the line. They could not swamp American markets with lumber if they should try. They need all they have at home, and have no cheap surplus to dump on American markets. Canadians argue that in times of business depression there, free trade might enable their mills to unload on the United States. That is a remote chance.

Canada has very little hardwood; not nearly enough to supply its own people. It is impossible that hardwoods from that country can have any effect on markets in the United States. More hardwood is cut yearly in the state of Ohio alone—a strictly agricultural state—than in the whole Dominion of Canada. It is, therefore, evident that hardwoods may be dismissed from all consideration as far as imports from Canada are concerned.

The whole question regarding imports from Canada, concerns softwoods. That country has not an important wood which does not grow in equal or larger amount in this country. Lumber that it can ship across the line, under free trade, will come into immediate competition with lumber of equal or better quality on this side. In many instances Americans are manufacturing lumber at less cost than the Canadians are able to do. How, then, will it be possible for Canadians to compete on our own ground? The following cost figures are from the latest Canadian and American reports. The mill yard cost of white pine in Canada is $20.01, in the United States $18.93; Douglas fir in Canada $13.94, in this country $13.09; western yellow pine in Canada $15.22, in the United States $14.26; average for all lumber in Canada $15.42, all in United States $15.80. Spruce is the only softwood that is cheaper in Canada than in this country.

Some Canadian lumber has always entered the United States, after paying the duty, and there is no doubt that it will continue to come, for the same reason under free trade. Imports have been and will continue to be controlled largely by local conditions. Near the border it is often more convenient for a consumer to use Canadian lumber, which is near at hand, than to buy at a greater distance in this country. Such transactions will continue, whether there is tariff or free trade. In other cases a certain wood of good quality will be brought over the line, without much regard to price. An important instance of this kind in the past has been the use of Canadian white pine for shade rollers.

Little consideration seems to have been given to Mexico as a menace to American lumber markets under free trade. Two excellent and abundant pines grow there. One is the western or California white pine (*Pinus ponderosa*), the other the Mexican white pine (*Pinus strobiformis*). In normal times these woods might come into the United States at a cost sufficiently low to displace some of the pine now in use, because wages and stumpage are very low in Mexico.

It is not probable that free trade would bring in much more Siberian oak than is now coming, because it is high priced and has a wide market. Considerable imports from other countries appear improbable. Cabinet woods will not be on the free list; neither will furniture, casks, barrels, shooks, packing boxes, railroad ties, and paving blocks. It is expected that the duty will be removed from practically all other forest products.

Results as Predicted

WHILE THOSE RESPONSIBLE for this department of HARDWOOD RECORD take no more satisfaction out of the misfortunes of others than do the majority of human beings, it is difficult to refrain from suggesting in this connection that the facts recorded here conform precisely to the predictions expressed in these columns five years ago, and reiterated at various times since.

John R. Markley and Isaiah B. Miller, promoters, and Colonel Alfred G. Stewart, a director and commissioner; Charles M. McMahon, secretary and treasurer and William H. Armstrong, Jr., general manager of the International Lumber and Development Company of Philadelpuhia, were found guilty of conspiracy in the United States district court on April 12, on all counts. While this notorious get-rich-quick concern was thoroughly exposed in HARDWOOD RECORD as suggested above, no efforts were ever made to investigate its methods until Postal Inspector Cortelyou took up the matter, with the result that the promoters and officers were arrested, and a trial begun on March 3. At this trial these men were indicted on three charges of eight counts each. All were included in a general charge of conspiracy in devising a scheme to defraud and to use the mails in furthering the conspiracy. The maximum penalty proscribed by federal statute is a two years' term in prison or a fine of $10,000 on each count.

The charges against the defendants grew out of the exploitation by the company of a 288,000 acre plantation in the state of Campeche, Mexico. The concern in selling its $6,000,000 worth of stock represented that the proceeds were to be devoted to the clearing of the plantation, the exploitation of its timber and the planting of permanent crops, the profits from which were to pay a guaranteed dividend of eight per cent. The government alleged that in floating its stock issue, the company sent out voluminous advertising "literature" through the mails containing fraudulent and misleading statements regarding the actual and potential profit, the producing value of the Mexican property. It was also charged further that the eight per cent dividends paid to the stockholders were taken from the stock subscriptions rather than from the profits as represented.

Immediately after the verdict was rendered, James Scarlet, chief counsel for the defense, asked for an arrest of judgment for three days, in which to file reasons for a new trial. This was granted by the court with the consent of District Attorney John C. Swartley, counsel for the government.

Northern Cut and Shipments

THE CUT OF HARDWOODS AND HEMLOCK by fifty-two members of the Northern Hemlock & Hardwood Manufacturers' Association during March was 48,588,000 feet, while during the same month there were shipped 43,570,000 feet. The cut during March, 1912, was 50,977,000 feet and there were shipped during that month 49,678,000 feet. In hardwoods there was some noticeable excess of cut over shipments, as the total production of hardwood lumber by the fifty-two members reporting was 30,614,000 as against shipments during March, 1913, aggregating 17,680,000. These fig-

ures are almost identical with figures for March of the preceding year. A summary of the report shows that there is a decrease of eleven per cent in the hemlock cut of March, 1913, compared with March, 1912. The decrease in hemlock shipments was eighteen per cent. The decrease in hardwood cut and hardwood shipments were both one per cent. Thus the total decrease in cut in both hemlock and hardwoods during the year was five per cent and the decrease in shipments twelve per cent.

Reports from Wisconsin and upper Michigan give an interesting comparison of the estimated and actual log input for 1912-13. The estimated input of hardwoods during the 1912-13 season was 200,497,000 feet, while the feetage actually logged aggregated 202,763,000. For hemlock the estimated cut was 307,200,000 and the actual cut 289,579,000.

It can readily be seen that, according to the present outlook, the total lumber production in Wisconsin and the upper peninsula will be somewhat less in 1913 than in 1912.

First Sale of Appalachian Timber

THE FIRST SALE of the government timber included in the Appalachian Forest Reserve created under the Week's law has been filed at Washington. This sale involves a bill for seven dollars' worth of logs purchased by a farmer for barn construction. While this amount is insignificant in itself, it really represents the exact average value of each of the acres of forest land included in the Appalachian reserves. The total acreage of timberland purchased up-to-date under the Week's law now aggregates close to 500,000 acres. Considering that the first sale is probably the smallest sale that will ever be made of that timber, and that the average sale will bring in a far greater return than this first purchase, the logical conclusion of the proposition is manifest.

It may be seen that while the government can afford to purchase this timberland and hold it subject to sale, no privately owned corporation could do so. It is very probable that the time is not so far distant as to be indiscernible when the total acreage embraced in the Appalachian and White mountain reserves will have been paid for by just such sales as this, and in the meantime the main purpose of the reserves is being accomplished, namely, conserving the flow of water at the head waters of the various streams emanating from that country.

Possibilities of Free Advertising for Wood

AT THE TIME OF THE INAUGURATION OF THE PLAN for a country-wide advertising campaign for forest products, HARDWOOD RECORD maintained that the most efficient and most economical means of gaining the required publicity throughout the country was by securing reading notices in the daily press and current periodicals. HARDWOOD RECORD argued that the factor contributing mainly to the supposed animosity on the part of the editorial departments of the daily press toward lumber and woodworking industries was their utter ignorance of the methods pursued by these industries. It argued further that newspaper editors in general did not wilfully plan to push the substitutes of lumber as against the products of the forest, but that they had been given so much more information in readable news form about lumber substitutes that they very naturally pursued a policy in favor of such products. This publication maintained that by educating the daily press to a general knowledge of the lumber business and by supplying it with readable and newsy items and stories pertaining to the lumber business and its products, that industry could obtain a vast amount of advertising of a most valuable type at practically no cost.

These opinions have been borne out in innumerable cases which have been brought to the attention of HARDWOOD RECORD through its news clipping service, which supplies it with clippings from papers all over the country. One of the most recent and most favorable of these is from a prominent eastern daily paper. It has allotted over a column to an explanation of one feature of the lumber business and the article unquestionably contains some suggestions which should go a long way toward setting the lumber business right in the minds of its readers. Regarding values of lumber, it says: "Advancing values is an indisputable sequence to exhaustion or reduced production and, while it is essential that timber supplies shall be more sensibly conserved, it by no means follows that the use of lumber shall be wholly displaced or that there is not ample supply for many generations under just usage, nor that prices are prohibitive, if the available newer woods are introduced where the old and familiar woods have vanished from the markets.

"The belief in the depletion of all lumber and the higher prices that are continually discussed come from actual exhaustion of well-known species and grades still in demand, and in ignorance of or refusal to consider other supplies or woods of equal or better values. There exists a pronounced obstinancy in some of the older states, it is found, to believe that this can be true, *yet there is ready willingness to take up with materials that have absolutely no recommendation beyond the maker's assurance.*"

Articles of this nature can do a great deal toward favorably impressing the public mind with the quality of lumber products as against the products of competing industries. The fact is to be deplored that there are not more of this character of articles submitted to the daily press.

Practical Figures on Hardwood Utilization

THE MOST PERTINENT PHASE of the question of forest conservation from the practical lumberman's viewpoint is that of closer utilization of the various products of the forest, where such close utilization can be effected with a profit.

This issue of HARDWOOD RECORD contains a report of an address delivered recently by a prominent northern manufacturer who has gone deeply and exhaustively into the question, both as applied to woods and to mill operations. The story is particularly pertinent to northern manufacturers.

The writer of this article, in estimating his percentage of loss in various operations, figured on the basis of the whole stand as a unit, and instead of simply arriving at a percentage of waste in an individual, average tree, he figured on the basis of percentage of weight in the aggregate stand. His conclusions coincide very closely with Forest Service deductions, which are based on percentage of waste resulting from each operation to an average tree averaged from a great number of species and individuals.

The figures taken from the Adirondacks by the Forest Service show that the loss in stumps left in the woods is two per cent; the loss in tops, eighteen per cent of the total; in manufacturing the lumber, sawdust or kerf effects a twelve per cent loss; bark, a ten per cent loss; slabs, eight per cent; edgings and trim, eight per cent; in dressing, four per cent is effected through the removal of shavings, so that the actual percentage of lumber produced from the average, individual tree noted is only thirty-eight per cent.

Australian Experiments

GOVERNMENT ACTIVITIES are popular in Australia now. There are state hotels, state butcher shops, and other enterprises, and the latest announcement is that the government has entered the sawmill and wood manufacturing business. In the case of the hotel and meat business, the patronage is the general public, but the manufacture of lumber and its products does not propose to go that far at the start. The sawmills will produce crossties for state railways only, and it is expected that the output will be about 1,500,000 a year. The furniture factory which was recently bought for $45,000 will begin by making furniture for the public schools. It is not claimed that it will be able to supply all needs, but it will work a beginning. The minister of education for New South Wales has figured to the cent what the saving will be on each piece of school furniture manufactured. He estimates, for instance, that $2.62 will be saved on each book case, $0.77 on a small desk, $1.74 on a large one, $0.73 on a small table and $2.31 on the larger size. It will be interesting to compare results with predictions and see how nearly they agree.

Pert, Pertinent and Impertinent

Her Crowning Glory

Mary had a new spring hat,
And, though accounts do vary.
Some people say her feet were all
That could be seen of Mary.

Flareups

They used to "spark," did he and she,
Each night ere they were wed,
And now they blaze out frequently
'Tis by the neighbors said.

Why Success Comes

The men who have achieved success are the men who have worked, read, thought more than was absolutely necessary, who have not been content with knowledge sufficient for the present need, but who have sought additional knowledge and stored it away for the emergency reserve. It is the superfluous labor that equips a man for everything that counts most in life.

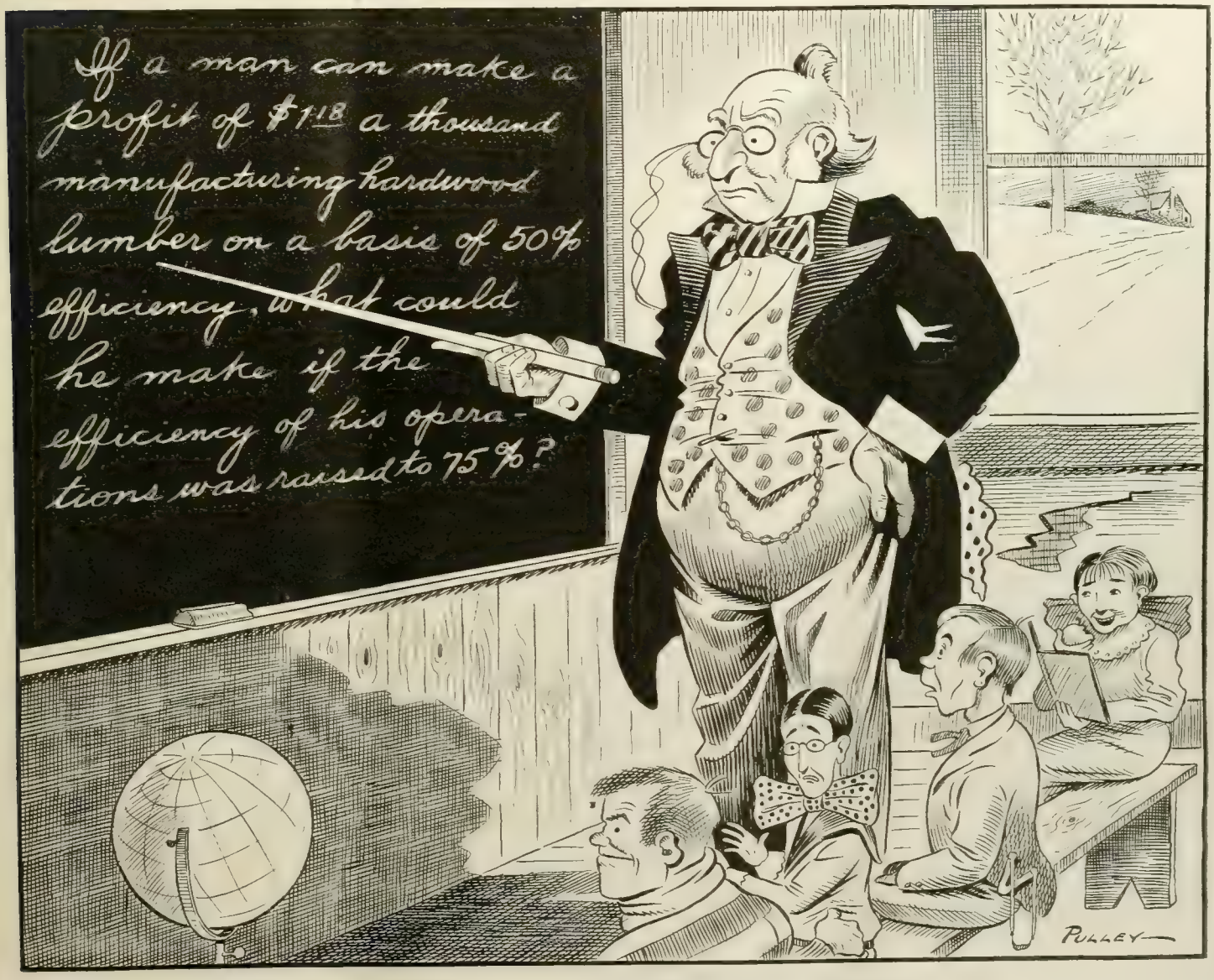
Hope

Behind the cloud the starlight lurks,
Through showers the sunbeams fall.
For God who loveth all his works
Has left his hope with all. —*Whittier.*

A Professional Secret

The doctor—'tis a shame to tell—
In spite of all his skill,
Though he may know you very well,
Prefers to know you ill.

THE LUMBER PEDAGOGUE



A practical demonstration of this problem would prove interesting.

Modern Medium

Modern Girl—"If you really loved me all the time why didn't you let me know?"

Modern Youth—"I couldn't find a post card with the right words on it."—*Judge.*

A Case for Reno

Heck—"Were you ever injured in a runaway?"

Peck—"Yes, I eloped with the woman who is now my wife."—*Boston Evening Transcript.*

Quite Safe

The Lawyer—"But suppose, after we begin this suit for breach of promise, the defendant offers to marry you?"

The Lady—"Oh, I don't think he will. He has never shown any inclination that way."

Unnecessary Trouble

"I *am* a self made man, I am."

"Well, I think there is one thing you needn't worry about."

"What is that?"

"Taking out a patent."—*Tit-Bits.*

The Usual Thing

"She told him that he was the only being in the whole wide world who had ever really understood her."

"And so, of course, he will marry her and spend the rest of his life in trying to understand her."

Affection

Mother (after relating pathetic story)—"Now, Reggie, wouldn't you like to give your bunny to that poor little boy you saw to-day who hasn't any father?"

Reggie (clutching rabbit)—"Couldn't we give him father instead?"—*Punch* (London.)

Wise men change their minds about the comforts of the average summer hotel; fools keep right on going year after year.

Profitable Lumber Advertising

WRITING COPY

Editor's Note

This is the second of a series of six articles on "Profitable Lumber Advertising," which are written by a lumberman who has fully demonstrated his ability to secure substantial profits from lumber trade newspaper advertising, backed by an unusual ability in the preparation of forceful and convincing "copy." The next article will be on the subject of "Points About Writing Copy."

Have you ever read an advertisement that made you stop, think, follow the line of its reasoning—that seemed to create in you a desire for the article advertised and to impel you to sit down and write that advertiser, or that made you go to a store and ask for the article? Perhaps you didn't analyze it in quite that way at the time. Perhaps you didn't realize that months before you saw that particular advertisement, some advertising man when "sizing up" *you*, the prospective buyer, imagined that about five thousand other "you's" were standing in front of him and that he was sizing you all up to talk to you about his goods. After he had studied you from every possible standpoint, after he had thought out the objections you would possibly make, after he had thought out the easiest way for you to get the goods, he wrote that advertisement. Then he figured out the ways to reach you—decided what magazines or papers you read, the ones that you had confidence in, whose policy it was to admit nothing in their advertising sections that was not perfectly legitimate. Then the advertising man's "layout man" sized up the space in which the advertisement was to appear, carefully noted the surrounding advertisements and then drew up a sample border or specified a type-border, specified a type for the body-matter, drew in the headings and subheadings roughly, specified the type for these, so that when his work was completed, he had a fairly accurate picture of what the general advertisement would look like when set up and run. The copy and the layout were fastened together and sent to the magazine which after setting up, sent back proofs to be carefully checked and corrected. Finally it appeared in the paper or magazine as you saw it and probably had the effect on you that was at first outlined. All of the foregoing is part of the writing, planning, and workings of the business of advertising.

The first point to consider in writing advertisements is the assembling of proper selling points in their logical order for the writing of the copy or body-matter of the advertisement. A selling point is any point of advantage. Just as in selling lumber, in the general run, a man who has stock 6% 14′ and 16′ has, these days, on account of so much short lumber, a splendid selling point. Stock that is twelve months dry offers another splendid argument and one that will bring an extra good price in these times. Thirty per cent 10″ and up wide in plain oak is another good point, as is stock that is cut 1⅛″ so that when dry it is full thickness. Get the ideas? Here is another—genuine forked-leaf white oak that for use in furniture takes a quick and perfectly even "fume." These are just a few specific selling points as illustrations. An advertisement is merely a group of selling points in logical order and written in language to suit the readers of some particular class of a certain paper or papers.

DESCRIPTION OF ARTICLE

In writing your copy, don't merely describe the stock and say "carefully seasoned," for that is simply a general statement and doesn't mean anything to the man that reads it. General statements don't count for anything these days—you must be specific in everything. Say, for instance, "This lumber is piled with 1½" stickers, every two feet apart and has been so piled for 12 months, insuring proper drying. It is now bone-dry. Cut a board open at any point and see for yourself." There you have put facts into convincing language. Don't merely say, "Carefully graded," but tell how good it is—say, "fully 5% better than the rules call for," or "we grade this gum without sap on the edges although the rules allow it." This may be just the stock some buyer has been looking for and by being specific in the description of it you will interest him right away. Don't say "will cut better for your work," but say "is especially suitable for long-rippings and if used for this purpose will cut to from 5 to 10% better advantage than ordinary stock at a cheap price—this is, therefore, cheaper to buy than other stock." When you make definite statements like the above you give the buyer something tangible to judge from.

FUNCTIONS OF AN ADVERTISEMENT

The following are the proper functions of a selling advertisement: To attract favorable attention; to create desire; to inspire confidence; to carry conviction; to impel the reader to take some action toward getting the article or more information regarding it. When you carefully think about it, you can see the fallacy of most present-day lumber advertising—the "standing-card" style.

To write the copy or body-matter along the above lines for a lumber advertisement is not as difficult as might be imagined. We'll go into it and follow out the successive steps. Suppose you have 100,000′ of 1″, 1s and 2s plain white oak. Go out and look it over for the selling points. Suppose it runs 60% 14′ and 16′ and 20% 10″ and up wide; that it is of even color and texture, close-grained, yet soft and therefore easy to work. This latter is a great point, for nearly every consumer thinks of his machines. If stock is softer, they prefer it as it means less wear and tear on the machinery, less grinding of the knives, etc. On account of its even color, it should "fume" easily and quickly. Supposing that the above comprises our list of selling points, let us consider the logical questions to answer before we attempt to write the copy for the advertisement.

Ques. 1—Who are the logical buyers—planing mills? yards? furniture men? molding men? etc.

Ques. 2—Are the advertisements to create a demand for the retailers of lumber? Are they to call the architect's attention to the wood? Or for substitution for another wood? Are the advertisements to be directed to the public to tell that body the merits of a wood with which they are not familiar? Is there a demand for the wood already?

Ques. 3—What mediums are to be used—newspapers? trade-papers? magazines? mail-stuffers? letters?

Ques. 4—Has the medium the circulation you want; does it reach the particular class or classes of trade that the advertisement wants to "talk" to and interest?

Ques. 5—What is to be the size of the advertisement?

Ques. 6—Shall all the selling points be presented? Remember that in certain localities people are prejudiced one way or another. The best plan is to put yourself in the place of the buyer and his business, and then think what would most appeal to you.

Ques. 7—Shall we illustrate the ad?

Ques. 8—and Last—(this to be answered *after* the copy is written). We should now judge the copy impartially or hand it to some one else to read, to see that it is perfectly clear, that it carries conviction, that it creates desire, that it is truthful, and that it will impel the reader on perusal to take some action in regard to it.

Now we'll take the selling points that we found in connection with that block of your oak, and proceed to apply it and answer the questions to the above, before we write the copy.

Ans. 1—It is evident that high-class planing mills, yards, high-class furniture makers, molding and the like trades, are the logical buyers of this oak.

Ans. 2—Demand for oak is already established. It should be addressed to the buyers directly. Advertisement should show the superiority of this oak over other blocks of similar stock.

Ans. 3—Trade-Papers, mail-stuffers.

Ans. 4—The media you should select are those whose advertising would indicate that they go to the trade buying what you want to advertise. For instance, a paper carrying mainly veneer and hardwood lumber ads must of necessity go to the people who use those articles.

Ans. 5—Should be displayed in at least a quarter-page space. This will give room for interest-compelling display. Combined with this, attractive display and heading will insure the advertisement being seen and read.

Ans. 6—The prospective buyers should be grouped as a class for each paper and separate advertisements written. All the selling points should

be used to the yards, trim and molding mills, but only the vital ones for the furniture class.

Ans. 7—In this case, it is best not to use illustration. Everyone knows what oak is like.

Ans. 8—and Last—Cannot be answered until the copy is written in each case.

Without either ad having sub-heads or signatures, but using italics for emphasis (the use of which will be explained later on), the resulting advertisements will be somewhat on the order below—each man would probably write them differently, but in the main the results would be about the same. The ad to the first group should read:

DRY PLAIN OAK—IMMEDIATE SHIPMENT.

A block of 100,000 feet of 1-inch 1s & 2s Plain White Oak. This stock is band-sawed and perfectly manufactured. It has been piled with good, even strips, protected properly, and having been taken care of in that way for 10 months, under almost ideal drying conditions, is now ready for immediate use.

This Oak is close, even grain—the genuine forked-leaf stock. But yet it is soft and easily worked. No hard, flinty stock like that from the extreme South.

Just the Oak for Yard-trade for it runs 20 per cent 10 inches and up wide, and fully 60 per cent 14 feet and 16 feet. You don't often get stock to run that way these days!

This is the kind of oak you want. The price will interest you too.

Write us NOW—BEFORE YOU FORGET IT! Right now!

The furniture advertisement should read somewhat as follows:

OAK THAT IS ABSOLUTELY EVEN IN COLOR.

You know that it is really difficult to obtain Oak that is all one color. You know also that it takes considerable time and expense to properly "match-up" oak in your work. Here is YOUR chance to obtain stock that is all one color.

Our Oak is the genuine forked-leaf white oak and grows in Kentucky—on the western slope of the Blue Ridge Mountains. As it is all one color, when you have your goods "in the white" it all matches and with no expense to you for going over it with filler, etc. When your stock has to be "fumed" you will find this oak to take an "even fume" and you don't have the expense of going over it again with liquid ammonia.

We have 100,000 feet of 1-inch 1s & 2s Plain White Oak on hand now for quick shipment. It runs 20 per cent 10 inches and up wide, and from 50 to 60 per cent, 14 feet and 16 feet. It is dry and can be put right into your kilns.

Send your order for a car. We're going to sell this block quickly, SO ACT AT ONCE! The price is right.

Do it NOW—before you forget it!

The copy for the two foregoing follow out the best principles of advertising and ones that the writer has been taught in his study of this science.

Now, we are in position to answer Question 8 and last—We find that both ads follow out the several questions outlined. You will note that the advertisements in both cases are written directly to the people of classes of trade. Note the method of closing used to hasten the reply. That is what is called "impelling the reader to take action."

The Country's Timber Supply

The Department of Commerce and Labor has published another installment of its report on "The Lumber Industry." The portion recently made public is "Part 1, Standing Timber." The report was made to the President, under date of January 20, 1913, by Luther Conant, Jr., Commissioner of Corporations. The document makes a book of 300 pages.

It is not entirely new matter. A considerable part of it was made public when Herbert Knox Smith was Commissioner of Corporations, in a report and a letter which he sent to President Taft under date of February 13, 1911. Some of the leading points in that report were widely published in newspapers and trade journals at the time; but the material has been revised, and the present report embodies later investigations and conclusions, and is doubtless intended to be final so far as standing timber is concerned; but the public is permitted to infer that other reports on the lumber industry are to follow, though their precise nature is not stated. That, however, is a bridge which need not be crossed until it is reached, but the report on standing timber is now before the public and is apparently as complete as the Bureau of Corporations ever expects to make it. A summary of its contents, therefore, is in order. It is necessary to make a somewhat careful analysis in order to reach the gist of the report.

As is well known, the primary purpose of the exhaustive investigation carried on during many months by the Bureau of Corporations was to ascertain the ownership of large timber holdings in order to determine whether the country's forest wealth was being concentrated in the hands of a comparatively small group of owners. The revised report, as now published, contains little that is new along that line, and a very brief review of the conclusions on that subject will suffice.

The Bureau of Corporations divided the country in three regions, each of which was designated as an "investigation area." One was the southern pine regions, another the Lake states, the third the Pacific Northwest. It should be clearly understood at the start that these areas do not include the whole of the United States. The southern pine region embraces the areas where the southern yellow pines grow, that is, parts of Virginia, North Carolina, South Carolina, Georgia, Missouri, and the whole of Florida, Alabama, Mississippi, Louisiana, Texas, and Arkansas.

The Lake states area includes Michigan, Wisconsin, and Minnesota.

The Pacific Northwest embraces California, Oregon, Washington, Idaho, and Montana.

This leaves much of the United States outside of the investigation areas, and this should be borne in mind in considering the following figures concerning ownership of timber. The amount of privately owned commercial saw timber in the three investigation areas is placed at 1,747,000,000,000 feet, board measure. It is stated that the Southern Pacific Company owns 105,600,000,000 feet; Weyerhaeuser Timber Company owns 95,700,000,000 feet, and the Northern Pacific Company 36,200,000,000 feet. Five other owners have 102,000,000,000 feet; 14 hold 119,500,000,000; 26 hold 115,300,000,000; 42 hold 116,200,000,000; 105 hold 149,200,000,000; 190 hold 132,400,000,000; 273 hold 96,400,000,000; 489 hold 84,800,000,000; 655 hold 55,500,000,000, and other owners hold 582,200,000,000.

The Timber Stand

The Bureau of Corporations estimates the total stand of merchantable saw timber in the United States, as follows:

In the investigation areas	1,747,000,000,000 feet
National forests	539,000,000,000 feet
Other Government land, Indian reservations, States, etc.	90,000,000,000 feet
Other timber	450,000,000,000 feet
Total in United States	2,826,000,000,000 feet

The bureau made the estimate for the investigation areas; and the Forest Service supplied figures for the rest of the country.

These figures should be accepted as the best estimates that have been made up to the present time; but they are only estimates and should be considered as such. The Bureau of Corporations made no timber cruises. It secured its information from owners, and usually accepted their figures, supplementing them by other information which was considered reliable. The quantity of timber credited to the National Forests is probably fairly accurate, but it is not based on actual cruises except in a few instances. The same may be said of the figures representing the timber on unreserved government land, on Indian reservations, and that belonging to states. The large item of 450,000,000,000 feet of timber on private land outside the investigation areas, is probably the least reliable estimate of all, though there is nothing better available. It is pretty hard to determine how much timber is scattered over twenty or more states, in forests, patches, and woodlots; yet that is what the estimate of 450,000,000,000 feet includes.

A study of the figures compiled by the Bureau of Corporations for the investigation areas reveals a basis for estimates of timber stand in some of the outside areas, particularly for hardwoods. The bureau did not have that purpose in view, but the statistics are capable of wider interpretation than the report itself indicates. Reference to that matter will be found below, but first the bureau's figures on

timber stand should be given. They show some interesting facts, and contain a few surprises for persons who suppose that a timber famine is upon us.

Pacific Coast Woods

More than half of all the standing timber of the United States is in California, Oregon, Washington, Idaho, and Montana. The supply in each of those states is shown as follows:

California	381,400,000,000 feet
Oregon	555,800,000,000 feet
Washington	391,000,000,000 feet
Idaho	129,100,000,000 feet
Montana	65,600,000,000 feet
Total	1,512,900,000,000 feet

The largest item in this total is Douglas fir, 521,900,000,000 feet. At the present rate of cutting, the supply of Douglas fir will last one hundred years.

The next largest stand is that of western yellow pine, commonly known in the market as western pine, or California white pine. The stand is 153,400,000,000 feet, the annual cut about 1,562,000,000 feet, and at that rate the supply will hold out ninety-eight years.

Redwood is third in amount and is credited with 101,900,000,000 feet. The yearly output is 540,000,000 feet, and there is enough timber to last at the present rate 190 years.

Western hemlock's stand is placed at 57,400,000,000 feet; the annual cut is approximately 175,000,000,000; and there is enough at that rate to last 315 years.

Western red cedar has a stand of 56,700,000,000 feet. The yearly drain is difficult to estimate because it consists of lumber, shingles, and poles; but a liberal estimate of the cut indicates that the supply will last more than a century at the present rate of cutting.

Sugar pine is confined almost wholly to California, and the stand is placed at 34,700,000,000 feet. The yearly drain on this supply is 100,000,000 feet, indicating that there is enough sugar pine to meet that demand for nearly 350 years.

The stand of Idaho white pine is placed at 19,600,000,000, and the present rate of cutting, if continued, will exhaust the supply in eighty years.

Hardwoods are not counted in the estimate of timber stand in the Pacific Northwest, for the reason that they amount to little in that region.

The Lake States

This area covers Michigan, Wisconsin, and Minnesota, where the total stand of privately-owned timber is placed at 100,000,000,000 feet. Of this amount 47,600,000,000 are in Michigan, 29,200,000,000 in Wisconsin, and 23,200,000,000 in Minnesota. The quantity and kind in each state are shown as follows:

Species	Michigan.	Wisconsin	Minnesota
White and Norway pine	2,000,000,000	3,200,000,000	12,500,000,000
Hemlock	15,000,000,000	11,600,000,000	.....
Tamarack	2,000,000,000	1,200,000,000	2,200,000,000
Spruce	1,200,000,000	200,000,000	2,000,000,000
Cedar	1,400,000,000	600,000,000	500,000,000
Jack pine	.....	300,000,000	1,100,000,000
Balsam fir	600,000,000	.....	500,000,000
Maple	12,200,000,000	2,300,000,000	.....
Birch	5,100,000,000	4,300,000,000	700,000,000
Basswood	2,200,000,000	2,500,000,000	400,000,000
Elm	2,100,000,000	1,500,000,000	100,000,000
Beech	1,600,000,000	.....	.....
Ash	600,000,000	300,000,000	100,000,000
Aspen	.....	.....	1,700,000,000
Oak	200,000,000	300,000,000	200,000,000
Palm of Gilead	.....	.....	300,000,000
Miscellaneous	1,400,000,000	900,000,000	900,000,000

The total stands of the various species listed in the above table follow: White and Norway pine 17,700,000,000; hemlock 26,600,000,000; tamarack 5,400,000,000; spruce 3,400,000,000; cedar 2,500,000,000; jack pine 1,400,000,000; balsam fir 1,100,000,000; total softwoods 58,100,000,000. The hardwood totals follow: Maple 14,500,000,000; birch 10,100,000,000; basswood 5,100,000,000; elm 3,700,000,000; beech 1,600,000,000; ash 1,000,000,000; aspen 1,700,000,000; oak 700,000,000; balm of Gilead 300,000,000; miscellaneous 3,200,000,000; total hardwoods 41,900,000,000.

It is not improbable that persons well acquainted with timber conditions in the Lake states will question some of the above figures. The Bureau of Corporations submits them as the best to be had, but is inclined to the opinion that the stand of pine in Wisconsin is too small, and that the quantity of oak in the three states has been underestimated.

Supply and Use

The yearly cut of the various species by sawmills in the Lake states is known with a fair degree of accuracy. If the Bureau of Corporations' figures which give the stand of the different species is accepted, it is easy to estimate how long the supply will last at the present rate of cutting. The amounts taken from the forests vary from year to year, but the latest figures may be accepted as an average. Calculations made on this basis indicate the length of time the forests of the Lake states may be expected to hold out. The figures should be accepted as rough approximations and not as demonstrated facts, because several factors are not given due weight, and their influence will lengthen or shorten the periods:

Pine	9 years
Hemlock	20 "
Spruce	36 "
Tamarack	43 "
Balsam fir	56 "
Cedar	90 "
Oak	10 "
Beech	15 "
Ash	22 "
Maple	22 "
Basswood	25 "
Elm	30 "
Birch	40 "

In considering the above figures it should be borne in mind that the sawmill output only is taken account of in estimating the drain upon the forests. There are several other drains, notably hewed crossties, poles, staves, and rotary cut veneers. These products do not pass through sawmills. If they were counted in the output, the term of years which the different woods may be expected to last would be somewhat shortened.

Southern Pine Region

The states included in this area have been listed above. The portions of Virginia, North Carolina, South Carolina, and Georgia not included lie among the mountains, where little or no yellow pine grows.

The estimates made for this region by the Bureau of Corporations places the stand of longleaf pine at 232,300,000,000 feet; shortleaf pine (including loblolly) 152,100,000,000; cypress 40,400,000,000; hardwoods 209,200,000,000; total 634,000,000,000. This stand of merchantable timber is apportioned among the eleven states as follows, the figures representing M board feet:

	Longleaf	Shortleaf	Cypress	Hardwoods	Total
Missouri	1,100,000	900,000	7,900,000	9,900,000	
Arkansas	26,000,000	2,200,000	50,500,000	78,700,000	
Texas	22,400,000	22,500,000	200,000	20,900,000	66,000,000
Louisiana	52,500,000	15,200,000	15,700,000	36,400,000	119,800,000
Mississippi	47,600,000	14,800,000	1,900,000	31,000,000	95,300,000
Alabama	25,600,000	12,400,000	200,000	18,100,000	56,300,000
Florida	58,200,000	900,000	10,700,000	4,100,000	73,900,000
Georgia	18,500,000	13,200,000	2,800,000	11,500,000	46,000,000
S. Carolina	4,600,000	14,600,000	2,600,000	8,900,000	30,700,000
N. Carolina	2,900,000	22,700,000	3,000,000	14,300,000	42,900,000
Virginia	.....	8,700,000	200,000	5,600,000	14,500,000
Total	232,300,000	152,100,000	40,400,000	209,200,000	634,000,000

Supply and Use

Estimates may be made of the probable time the southern pines, cypress and hardwoods will last at the present rate of cutting. It is necessary, however, to consider the southern pines in the aggregate and not in detail, because sawmill statistics do not separate them according to species. All are grouped as yellow pine. The hardwoods included are those only which are growing in the states shown in the above table. Estimates based on the stand and the yearly cut of sawmills indicate that the southern yellow pines may be expected to last twenty-seven years if the present rate of cutting is maintained; cypress forty years; hardwoods seventy-five years.

The Bureau of Corporations did not compile figures showing the

stand of various species of hardwoods separately in the southern pine region, but estimates, expressed in percentages of the whole hardwood stand, were made for oak, gum, hickory, and ash. By converting those percentages into feet, the following interesting table has been compiled. The stand of each of the species is shown, not only in the region as a whole, but in all of the eleven states separately. These figures in this form have never before been published. It is not claimed that they possess a high degree of accuracy, but only that they are the most careful estimates that have ever been made, covering this area. The Bureau of Corporations doubtless had fuller data on the subject than had ever been brought together before, and the conclusions shown in the following table are worthy of thought.

ESTIMATED STAND OF HARDWOODS M FEET

State	Oak	Gum	Hickory	Ash	Miscellaneous
Missouri	3,818,000	2,212,000	158,000	316,000	1,898,000
Arkansas	26,765,000	11,615,000	3,030,000	1,010,000	8,080,000
Texas	6,897,000	3,971,000	629,000	836,000	8,569,000
Louisiana	10,920,000	9,100,000	1,092,000	1,820,000	13,468,000
Mississippi	10,023,000	7,750,000	1,240,000	930,000	10,850,000
Alabama	8,145,000	2,172,000	1,267,000	181,000	6,335,000
Florida	328,000	372,000	41,000	82,000	3,157,000
Georgia	2,875,000	1,265,000	480,000	575,000	6,325,000
South Carolina	1,780,000	2,936,000	178,000	267,000	3,649,000
North Carolina	4,004,000	4,290,000	143,000	143,000	5,720,000
Virginia	2,184,000	1,008,000	560,000	560,000	2,296,000
Total	77,739,000	46,443,000	8,798,000	6,720,000	70,347,000

SUPPLY AND USE

The annual sawmill output of oak in the eleven states listed in the above table is approximately 1,355,000,000 feet. If this rate of cutting continues it indicates that the oak in the area will last fifty-seven years.' No account is taken of oak converted into staves and hewed crossties, and if this quantity were included, the period which the oak timber may be expected to last would be considerably reduced, probably about ten years.

On the same basis of estimate, it is indicated that the gum (including red gum and tupelo) in the area will last about eighty-one years; hickory seventy-seven years; ash eighty-two years; and miscellaneous hardwoods one hundred and ten years.

OUTSIDE AREAS

As previously stated, the Bureau of Corporations omitted several important areas from its scope of investigation. One of the districts thus left out contains a large amount of valuable hardwood as well as much softwood. It includes New England, New York, New Jersey, Delaware, Pennsylvania, Maryland, West Virginia, Ohio, Indiana, Illinois, Kentucky and Tennessee. Some of this omitted territory is the best hardwood region of the United States, and it is to be regretted that it was not included in the scope of investigation. The Bureau of Corporations was not looking so much after the stand of timber as after the ownership; and this is probably the reason that the above states were left out of the investigation. The timber is not generally held in large bodies, but by innumerable small owners.

It is possible to use some of the Bureau of Corporation's data in estimating the stand of timber in states outside the investigation area. For example, it was found in the southern states investigated that the annual cut of oak was one foot in fifty-seven of this stand; ash one in eighty-two; hickory one in seventy-seven; and miscellaneous hardwoods one in one hundred and ten. If it is assumed that these ratios of cut to stand hold good for hardwoods in the states from New England to Tennessee, it becomes easy to estimate the stands in those states on that basis, for the annual sawmill cut is well known for all the states. There is no apparent reason why the ratio does not hold as well in the eastern hardwood region as a whole as in the southern part of it. Basing calculations on that assumption, the following table has been compiled to show the probable remaining stand of certain hardwoods outside the areas investigated by the Bureau of Corporations. There is not much gum outside the southern pine belt, and it is not included in the table. It may be stated, however, that the estimate shows about 7,000,000,000 feet outside the southern investigation area; or about 53,443,000,000 feet for the United States.

The table showing the estimated stand of certain hardwoods in states from New England to Tennessee follows:

	Oak. M Feet	Hickory. M Feet	Ash. M Feet	Miscellaneous. M Feet
New England	3,700,000	.....	972,000	464,000
New York	2,000,000	90,000	705,000	323,000
Pennsylvania	13,300,000	681,000	540,000	525,000
Maryland	2,700,000	106,000	41,000	60,000
West Virginia	25,000,000	936,000	540,000	830,000
Ohio	13,500,000	1,401,000	1,700,000	340,000
Indiana	10,400,000	1,521,000	1,500,000	350,000
Illinois	3,700,000	544,000	238,000	33,000
Kentucky	22,500,000	1,971,000	1,500,000	1,250,000
Tennessee	25,000,000	3,160,000	1,125,000	686,000
Totals	121,800,000	10,410,000	8,861,000	4,861,000

The above table was worked out on a uniform basis of cut per year to stand in the whole regions. While the basis is the same as that applied to the same woods in southern states, it may not hold for such states as Ohio and Indiana, where the cut probably bears a higher ratio to the stand. However, since precise information on this point is not available, the calculations were made on the assumption that the ratio of yearly cut to the whole stand is uniform throughout the region.

SUMMARY

Using foregoing figures, it is practicable to compile a summary of the hardwood stand in the United States. The correctness of this summary depends, of course, upon the correctness of the figures already given in detail. In the summary no account is taken of hardwoods west of the Mississippi river, except Louisiana, Texas, Arkansas, Missouri, and Minnesota. Some hardwoods are scattered over the western country, but the total of merchantable hardwoods there is comparatively small, though there is considerable scrub timber and brush. The figures in the following summary represent merchantable timber only, not small growth.

SUMMARY OF INDICATED HARDWOOD STAND IN U. S.

Oak of all kinds	200,239,000,000 feet
Gum of all kinds	53,443,000,000 feet
Hickory	19,208,000,000 feet
Ash	16,584,000,000 feet
Miscellaneous Hardwoods	115,108,000,000 feet
Total	404,582,000,000 feet

The latest statistics show a yearly hardwood lumber cut in the United States of 8,857,426,000 feet. At that rate the hardwoods will last about forty-five years. This does not take account of the use of merchantable timber for other purposes than lumber.

Taking the Bureau of Corporation's figures for the country's total stand of merchantable timber, 2,826,000,000,000 feet, and dividing it by the latest yearly lumber output, 40,018,282,000 feet, it is shown that the country's forests contain enough timber to supply sawmills, at the present rate of cutting, for approximately seventy years.

Relation of Tannin to Durability

While it has long been accepted that many woods owe their resistance to decay to the presence in them of tannic acid, it is only recently that actual experiments have demonstrated it. One of the most destructive of all fungi is *Merulius lacrymans*, which produces dry rot. A German investigator has found that tannic and gallic acid solutions of from 0.5 to 1 per cent hindered, while from 1 to 2 per cent completely stopped growth of this fungus.

Small blocks of oak heartwood were also extracted with hot water for varying periods. This was found to render them suitable for the growth of *Merulius*, while the uncooked blocks supported only a scanty surface growth. After three weeks it was estimated that the development was three times as strong as in the uncooked wood. The water extract from the wood was found to be poisonous to the fungus when mixed with gelatin media or dextrose solutions Spruce boiled in 2 per cent solution is immune to dry rot.

The results of these investigations would seem to raise a question as to the advisability of prolonged steaming of timber under high pressure. If by so doing the tannin in the heartwood is leached out the natural resistance of the material to decay is thereby reduced. This observation does not refer to steaming under high pressure and for a limited time employed in assisting lumber seasoning.

Profits From the "Sugar Bush"

As bi products from our northern hardwood forests, maple sugar and syrup are coming into greater prominence in the efforts to utilize to best commercial advantage all of the available assets. For a long time the industry has been generally considered as a woodlot proposition, but in portions of New York, New Hampshire and Vermont the hard maples are frequently tapped before logging, even on some of the large operations, in the same way that the southern longleaf pine is being bled for turpentine and rosin before being logged.

The art of making maple sugar was learned by the early settlers from the Indians. This was the only kind of sugar that they had at that time, for cane sugar was practically unobtainable by them. Vessels of clay or bark were used to catch and carry the syrup in. The settlers did not improve the old method of obtaining sugar, merely substituting iron or copper vessels in which to handle the syrup. The trees were tapped in the old Indian way, and the sap caught in wooden troughs, usually hollowed out parts of logs. The boiling was invariably done in the open woods, no protection being provided against snow and rain or other impurities. The fuel was near at hand, dead and down timber being largely used. After the sap had been boiled down to the consistency of thin syrup it was stored until enough was on hand to "sugar off." The early product was dark in color and variable in quality. At first not very much was made, but in the course of time the industry assumed commercial importance in the northeastern states.



THE OLD PRIMITIVE AND WASTEFUL METHOD OF SUGAR TAPPING

Maple sugar at first was an article of food; now it is a luxury. Pure maple sugar and syrup are now very scarce articles on the market and bring very high prices. It has been estimated that at least seven-eighths of the maple sugar and syrup sold today are not genuine. There are large concerns that buy up the pure article, and use it to flavor a body of glucose or cane sugar from six to ten times as large as the original maple sugar, and this resulting mixture is then put upon the market as pure maple sugar. An Indiana man has even taken out a patent to protect the process by which he makes maple syrup by flavoring with an extract of hickory bark.

For these reasons the maple sugar producers do not like to sell their products to these "mixers," as they are called, but prefer to sell the pure sugar



COLLECTING SAP IN THE SUGAR BUSH

to customers directly. In order to protect themselves and the trade, these growers have organized maple sugar makers associations. The Vermont Maple Sugar Association is an especially strong one. It has done much to uphold the legitimate trade, its object being to control the trade through organization. When maple sugar is backed by one of these associations the consumers can depend upon its purity.

The importance of the industry is shown by the fact that annually about 14,000,000 pounds of maple sugar and about 4,000,000 gallons of syrup are produced.

SUGAR MAPLES

All of the maples have sweet sap, but from only a few of them has sugar been made in paying quantities. The first place is held by the true sugar maple (*Acer saccharum*) and a variety of it —the black maple (*Acer saccharum nigrum*), the red maple (*Acer rubrum*), the silver maple (*Acer saccharinum*), and the Oregon maple (*Acer macrophyllum*) are of less importance, and the box elder (*Acer negundo*) is the least important of all.

The range of sugar maple spreads over a wide area, but as a tree for the production of sugar it does best in the western New England, New York, Pennsylvania, and the northern Appalachians, the Ohio valley, the Lake states, and the adjacent parts in Canada. In its northern home it is often the principal forest tree, and forms from twenty-five to seventy-five per cent of the total stand.

The black maple is found in Vermont on the shores of Lake Champlain, ranging southward, west of the Alleghanies from Minnesota to Arkansas and eastern Kansas.

The red maple is found along the borders of streams and on low swampy ground. Its range covers almost the entire eastern United States. As a sugar producing tree it enters into consideration only where the sugar maple is not plentiful. Prejudice has been developed against this tree, because of the fact that its sap is often discolored.

The silver maple ranges from New Brunswick to western Florida and west through southern Ontario and Michigan to the eastern Dakotas, Kansas, and Oklahoma. The sap of this tree is also liable to discoloration, and its season is also short and uncertain.

The Oregon maple is the only western producer of sugar. The tree is found west of the Cascades and the Sierras, from the Canadian border to southern California.



THE LATEST DEVELOPMENT IN COLLECTING THE SAP—A PIPE LINE DIRECT FROM THE TREE TO THE SUGAR HOUSE

SUGAR GROVES

"The ideal sugar grove should contain that number of trees which will give a maximum yield of sap per acre." It has been observed that, an equal amount of sunlight given, the sap and sugar production are proportionate to the leaf area of the trees. The amount of leaf area is more important than the amount of light the tree gets. It is the leaves that manufacture the starch that is converted into sugar. It is seen then that the point to be observed in laying out a sugar grove is in getting the number of trees per acre consistent with the greatest possible crown development per tree. At the same time the ground must be kept heavily matted with leaves and humus. The maple must be supplied with plenty of moisture, hence the ground must not be allowed to become bare, with consequent evaporation of the soil moisture.

A peculiar climatic requirement has caused the commercial production of sugar to be confined to a small part of the area of the range of the maples. It is the gradual northern spring, with the



TYPICAL "SUGAR BUSH" WITH PAILS ON THE SOUTH SIDE OF THE TREES TO OBTAIN THE MAXIMUM YIELD OF SAP



THE OLD METHOD OF "BOILING DOWN" THE SAP IN THE OPEN COPPER KETTLES

slow yield of frost from ground, which makes the sap flow long and continuously enough to give a paying production of sugar. A sudden thaw affects both the quality and the quantity of the sap flow. Ideal weather for sugar production is warm, sunny days and cool nights. Cool rainy weather is not conducive to a vigorous flow.

For these reasons it is always desirable to maintain the best forest conditions in the grove, for if the ground is carpeted with a heavy layer of leaves and humus it will be less sensitive to changes in temperature.

The model grove should satisfy the following conditions as far as possible.

1. It should contain the greatest number of trees per acre consistent with fully developed crowns.
2. The forest cover should be unbroken so that in summer little sunlight falls upon the ground.
3. There should be a complete litter of humus and leaves, to the exclusion of grass and light demanding weeds.
4. Young trees should be kept in reserve to take the place of those that fall, and to fill other openings in the cover.
5. No grazing should be allowed in the grove.
6. The grove should be made accessible by a system of roadways to facilitate the collection of sap.

These conditions are somewhat ideal, and only an attempt can be made to observe all of them.

The best location for a sugar grove is where the maple thrives best. In the southen Appalachians, the groves on the northern slopes have the most desirable location, while in the middle states the moist, gravelly soils are the best. In the northern states where the maple does well on all exposures, the south one is preferred, because the sap of trees on such locations starts earlier.

MAPLE SAP

It is commonly supposed that the sap of a tree flows up from the roots in the spring and back to them in the fall, but this is not true, for when the trees are tapped as much sap comes towards the hole from above as from below. There is even sap flow from each side of the hole. The flow varies with the season, the day, and the temperature. Experiments have been made and as a result it was found that the force exerted by the sap on maple trees in the sugar making season varies from a suction of two pounds per square inch at night, to a pressure of twenty pounds per square inch during the day. The rise and fall of the temperature is responsible for this.

The sap season usually begins about the middle of March and continues until the third week in April. It varies with an early or late spring, and, of course, is later in the North than in the southern part of the region where the industry is carried on.

It is very difficult to determine the average yield of trees, but it can be said that a mature thrifty maple will produce about twelve gallons of sap, or three pounds of sugar per season. Instances have been recorded of trees having averaged ninteen gallons of sap per season, and of one tree having produced enough sap to make thirty and three-fourths pounds of sugar cake in one season.

Maple sap is a nearly colorless liquid composed of water, sugar, mineral substances such as lime, potassium, magnesia, and iron, and a small amount of vegetable acids. The flavor does not come from the sugar, but from some one or all of the constituents. Careful experiments have shown that on an average the sap contains about three per cent of sugar.

MANUFACTURE OF SUGAR AND SYRUP

An increased demand for sugar and syrup has brought about great improvements in the industry. The small growers still practice some of the old methods, but the commercial growers are constantly improving their equipment.

As soon as the sap is running, the trees are tapped. A spot on the sunny side of the tree is selected as the place to bore the hole. All loose bark that might fall into the sap is brushed off. The hole is made with a three-eighths or one-half inch bit, bored to a depth of one inch. Experiments have shown that this is the most practical depth. Trees under twelve inches in diameter should not be tapped. The spouts are then inserted. The most improved kinds are those made of metal and having one end threaded so that it can be screwed into the augur hole. In some places wooden spouts of sumach or elder are still used. The sap is caught in pails which are usually provided with covers to keep out impurities.

Small growers gather the sap with buckets, carrying it to the sugar house. Where the industry is carried on on a large scale, large tank wagons are used, and in some places pipe lines are used to convey the sap to the sugar house. The sap must be gathered at least once each day, and sometimes twice. This is because the temperature may become sufficiently high to cause the sap to sour.

The sugar house is usually a substantial, but inexpensive building. Its main part consists of an evaporating room. In the roof over this room is a ventilator which allows the steam which arises from the sap as it boils to escape. A large storage tank is also part of the equipment. This is usually placed on a side hill next to the sugar house, or is elevated. The sap then moves through the appartus by force of gravity. The tank is protected, so that it is proof against the extremes of the temperature.

The sap is run from the storage tank to the evaporator. This is an open pan, six inches deep, forty inches wide, and from ten to eighteen feet long. They are usually made with corrugated bottoms, to increase the heating surface. Partitions from side to side and open at alternate ends are placed in them at intervals of from eight to ten inches. The sap enters the evaporator at one end and flows slowly across the pan from side to side, around the partitions, until it reaches the opposite end. The rate of its flow is so regulated that it has reached the proper density when it reaches the other end. The flow is regulated according to the amount of heat the sap is receiving.

Underneath this pan is the firebox. This is built arch-shaped at the front end of the pan, its flue coming underneath the pans to the opposite ends. The pans are thus heated for their entire length. The sap is kept at a depth of one and one-half inches at the upper end, and one inch at the lower. As the impurities rise to the surface they are skimmed off. When the syrup reaches the temperature of 219 F., or a weight of eleven pounds to the gallon, a deposit of mallate of lime gradually commences to coat the pan. The syrup is then dipped out and strained through flannel, this removing the deposit. After ten or twelve hours the last two sections of the pan become more or less coated with this deposit. The pan is then turned around and the sap dissolves the lime, and it can then be caught in the strainers. Care is always taken that the syrup finishes at the proper temperature and weight per gallon. Much discussion has arisen regarding whether the syrup should be put up hot or cold. Both methods are used, but it is generally observed that the syrup has a tendency to crystallize when put up warm. Square, oblong, or round cans of one gallon, or one quart volume, are the popular packages in which the syrup is placed upon the market.

In making sugar, the syrup is reboiled in a sugaring-off arch until it begins to crystallize. This apparatus consists of a fire-box similar to the one used under the evaporator, but smaller in size. It has an open pan above it. The point of sugaring-off used to be determined by pouring a little syrup on the snow or by dipping a twig bent into the shape of a loop into the syrup. If the syrup becomes waxy on the snow, or formed a film within the loop, it was ready to sugar. Under modern methods the temperature is observed, and different temperatures denote different qualities. The temperature is slowly allowed to fall and then the syrup is poured into moulds and allowed to become sugar. The products are then stored in a cool, dry storeroom, as heat and moisture cause the sugar to mould, and the syrup to ferment.

The opportunities in this industry are becoming more attractive owing to the greater demand of maple syrup and maple sugar and their recent rise in value on the market. It is expected that the maple sugar business on a commercial basis will develop into an excellently paying proposition.

So much depends on the man at the lever in the sawmill that he should be appreciated and well paid, and should in turn appreciate his responsibilities and use his brains as well as his hands, for a little thinking often makes a big lot of difference in the value of the mill product.

Hardwood Reforestation Possibilities

There has been considerable interest of late shown in certain hardwood circles relative to the future supply of wood to furnish raw material for the vehicle, implement, furniture, cooperage, veneer, and various associated industries dependent upon a few species of high technical qualities such as the oaks, hickory, ash, yellow poplar, etc. It is a well-known fact that rapidly increasing demands and new lines of utilization are making vast inroads into the virgin supply of these woods and to such an extent that something must be done to meet the situation.

There are three available lines along which developments can be made to conserve our hardwood supply. First, more intensive utilization can be practiced to make the present source last as long as possible; secondly, substitute woods can be introduced to take the place of the rapidly diminishing supply of woods now in use, and lastly new timber can be grown.

It is obvious that more intensive utilization will help in this problem to a considerable degree and fortunately a great deal of attention is being given to this important subject, which has many undeveloped possibilities. However, in looking at the situation from the standpoint of a hardwood supply in the future, however remote, one can see at a glance that even the best and most complete utilization cannot insure the permanence of the original or present supply. Substitutes are being brought in both from foreign countries and from native sources by utilizing trees, hitherto little used, to take the place of our standby species such as oak, hickory, ash, etc., but here again only temporary relief can be expected, for eventually the foreign supplies will be cut off and our own native species will be consumed in the constantly increasing demands for hardwood materials. It has been conservatively estimated that even at the present rate of consumption our present total timber resources, both hardwood and coniferous, can not last over fifty or sixty years, and we are using approximately twice the amount per capita now that we did about fifty years ago. Furthermore, this ratio is increasing from year to year, rather than diminishing. Thus it is apparent that we must eventually look to some method of reforestation to furnish the necessary supplies for the wood-using industries that require hardwoods of special characteristics as well, in fact, for all forms of wood utilization, which the exigencies of trade require.



HARDY CATALPA PLANTATION ABOUT TWENTY-TWO YEARS OLD, YIELDING SMALL SAWLOGS, AS WELL AS POLES, POSTS AND TIES. CATALPA IS ONE OF OUR MOST RAPIDLY GROWING HARDWOODS.

Already the vehicle and implement associations have considered the possibilities of reforestation. Several railroads, prominent among which are the Pennsylvania, Delaware & Hudson, Santa Fe, and Delaware, Lackawanna and Western Railroads, have already taken up the work of planting to supply ties and railway timbers for the future. Several timber and paper pulp companies have taken up the problem of reforestation on a commercial scale and are acting on the results of successful experiments conducted by the United States Forest Service, various state forestry departments and investigations carried on by the various forestry schools.

In considering the possibilities of reforestation the question of the natural restocking of cut-over areas at once arises. The Forest Service estimates that our forests are being cut at least three times as rapidly as they are growing. Then, too, much of our lumbered areas have either been cleared for agricultural purposes or are burned over so repeatedly that the existing second growth is usually of little consequence or composed of an almost worthless variety of trees. The subject of natural reforestation is such a broad one that it deserves separate treatment. Suffice it to say that on a good deal of our cut-over forest, we must look to artificial methods to make them produce the kinds of trees that are in demand.

There are several considerations which influence the choice of species in planning reforestation on a commercial scale, among which the following are the most important: 1—Value of wood produced, 2—Rapidity of growth, 3—Cost of planting, 4—Freedom from insect and fungous attacks, 5—Adapatability to soil and climate.

Obviously one would choose the species which would yield the highest quality of wood and therefore the best financial returns, provided the other considerations were favorable.

Rapidity of growth is probably the most important factor in governing the choice of species. Some of our native American trees are inherently rapid growers. The following would therefore be the best from this standpoint—Yellow poplar, red oak, white ash, chestnut, black walnut, catalpa, black locust, red gum, basswood, cottonwood, Osage orange, honey locust, etc.

It is particularly unfortunate that white oak, the "king" of the hardwoods is not by nature a rapid grower. Of course, under favorable conditions, trees grow more rapidly than under adverse surroundings, but taken altogether white oak, hard maple and hickory, three of our best hardwoods, are slow growers.

Red oak, white ash, and yellow poplar have been extensively and successfully planted for timber and other products in various parts of the East. Black walnut has been planted for furniture wood and gunstocks. Catalpa, black locust, and Osage orange have given splendid results for planting for fence posts.

Cost of planting is also an influential factor. Some trees develop a long branching root system in their early youth, which renders them difficult and expensive to plant. Although some trees have been seeded in directly, yet the best success has been attained by first growing the seedlings in a nursery for a year or two before planting out on the area to be reforested. In this respect yellow poplar, ash, black walnut, locust, red oak, and catalpa are comparatively easily planted. Cottonwood can be propagated from cuttings stuck in the ground.

Freedom from disease from fungi or insects is also a very important factor. For this reason the planting of chestnut at the present time or until the disastrous bark disease can be successfully combated is out of the question. The black locust is also susceptible to the locust borer and for this reason the Pennsylvania and other railroads have abandoned planting it. A recent attack on the hickory in the East has also caused some alarm, but with increased care and

precaution against the importation of infected nursery stock and the prevention of the spread of some of the insect and fungous diseases, planting of most of our desirable hardwoods should be successful. It is a notable and promising fact that hardwoods are less susceptible to disease and injury by insects than the conifers.

Adaptability to soil and climate are apparently important. For instance, red gum and cottonwood must have a moist soil, catalpa must have a deep fertile soil and cannot endure severe winters, and red oak and chestnut must have a fairly well drained and fertile soil. It is the province of our technically trained foresters to study the habit and growth and requirements of each tree so that on a given site we may know what trees should be planted and what results may be expected under those conditions.

We have only to look to some of the European countries, and Germany in particular, to see what splendid success has been attained by their work of artificial reforestation by planting. They have even introduced a number of rapidly growing American species, such as black locust, catalpa, white ash, and yellow poplar, and some splendid plantations can now be found in various parts of Germany.

It is obvious that reforestation will become a profitable venture only when market conditions justify it and with the increase in value of some of our highest priced woods, more hardwoods will be planted. New York, which has now over 16,000,000 seedlings in its state nurseries and which distributes them at cost to lumbermen and others interested in planting work, is now engaged in raising red oak, white ash, and yellow poplar along with white, red, and Scotch pine on a large scale. With red oak closely following white oak in demand and prices, and white ash and yellow poplar meeting wider uses in our wood-using industries, they will be planted more and more, not only by the federal and state forest organizations, but also by lumber companies, railroads, and private organizations.

The cost of raising and planting seedlings varies with the species used, their age and the condition and location of the ground where planted. Under average conditions one or two year stock is used. These can be raised in a nursery for from $3 to $5 per thousand. Transportation and planting costs from $4 to $6 per thousand.

It has been demonstrated that spacing in rows 6 by 6 feet apart has given the best results. This means 1,210 trees per acre. In the final stand this number will be reduced to between 150 and 200, but such a large number is used at the start so that the trees will grow tall, straight, and symmetrical, and will yield clear lumber through the pruning of the lower limbs. The average cost per acre at present therefore will run from about $8 to $10 to establish a plantation. This is not taking the cost of the land into consideration. Timber lands that are not valuable for agriculture or without a valuable stand of trees on them have only a nominal value and can be appraised at only from $1 to $3 per acre.

Owing to the fact that reforestation in this country is still largely in an experimental stage as far as results are concerned, it is problematical as to the exact yields that may be expected. However, it has been definitely determined that with several species a merchantable product may be expected in from thirty to fifty years, depending upon the species and the kind of products desired. Catalpa and black locust posts have been grown in ten years. Yields as high as 15,000 feet board measure have been obtained in twenty-five years. With proper care and attention planted timber will grow a great deal more rapidly than under virgin or natural conditions. In Germany it is estimated that under scientific methods of forestry practice, many species can be made to grow from one and one-third to one and two-thirds times as fast as in the virgin state; and in this country our native trees grow naturally more rapidly than those in Europe.

N. C. B.



Rip-Saw Work



Efficiency in rip-saw work is just as important as efficiency in saw milling, planer work or any other machine woodworking, and it is now a larger subject than formerly by virtue of the simple fact that the rip-saw is entering more extensively into the work of manufacturing and refining lumber. The rip-saw enters into the manufacturing and utilization of lumber as a single side edger, as a gang edger, as a plain hand feed and power feed rip-saw, and in the factory at times as a sort of universal machine.

Where there is any quantity of work to be done it is a waste of time and energy to fool along with a hand feed rip-saw. The power feed machine is inestimably faster, and if the power feed rig has a roller both in front and back of the saw it is an unusually safe device for the operator to handle.

There is shown in connection herewith a view of a good type of power feed rip-saw working hardwood. The main object in offering this picture is to illustrate the subject of auxiliary attachments to the ordinary rip-saw table to get increased efficiency, to make the work safer and better. In front of this machine to the right of the picture is an infeeding table rest that supports the ends of long boards and relieves the sawyer from having to hold them up while they are feeding into the machine, while back of the machine is another table which supports the outfeeding ends in a similar manner. The tables are made portable so that in case there is a run of short stock they can be moved out of the way, or for extra long stock they can be moved back a space so as to support the additional length. In this instance the back table is a little lower than it need be. An outfeeding table should be just low enough for the stock to pass on to it easily from the saw table, for if it is too low it fails in its mission, which is to support the ends of the stock feeding out and prevent the weight of the outer end making a lever of the stock and tends to lift the weight of the feed rolls.

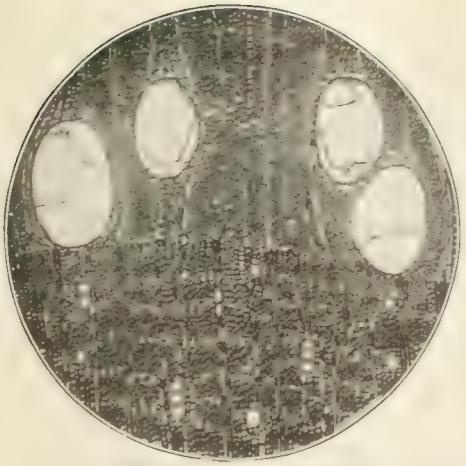


POWER FEED RIP-SAW

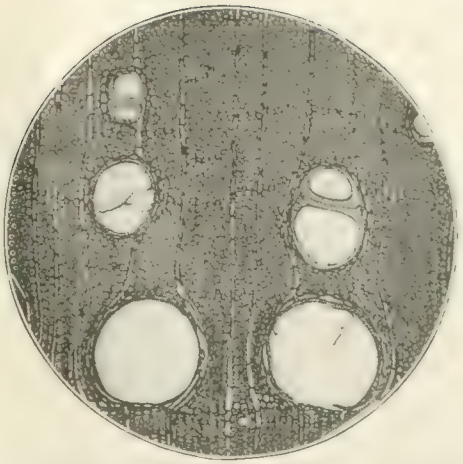
The different local requirements call for variations in the arrangement of auxiliary tables, but in some form or another these can nearly always be used advantageously in connection with rip saws. It is simply a matter of putting in the rip-saw in practically the same way the average mill gang edgers are installed, with tables in front and back, with the difference that the auxiliary tables on the rip-saw are made portable. They can be moved away for convenience in working short stock. They enable one to get a greater efficiency out of the rip-saw, and they help make rip-saw work less dangerous.



TANGENTIAL SECTION OF BLACK WALNUT SHOWING THE ENDS OF THE RAYS, TWO LARGE VESSELS, WOOD FIBERS, AND A NUMBER OF CRYSTALS



CROSS SECTION TWO GROWTH RINGS OF SHAGBARK HICKORY SHOWING SMALL, THICK-WALLED PORES, LINES OF WOOD PARENCHYMA, AND FOUR LARGE PORES



CROSS SECTION OF PIGNUT HICKORY SHOWING THE LARGE PORES, THICK-WALLED WOOD FIBERS, AND LINES OF WOOD PARENCHYMA

The Walnuts and the Hickories

The walnut family is of great antiquity. By means of fossil nuts and leaves its ancestry can be traced back millions of years, revealing a world-wide distribution. Now only two branches (genera) of the family exist in the United States—one (*Juglans*) including the walnuts and the butternut, the other (*Hicoria*) the hickories. Four other genera occur in the world, for the most part in eastern Asia.

It might not appear at first thought that walnuts and hickories are so closely related, but both bear nuts inclosed completely in a hull, and the leaves and flowers are very much alike. There are some striking differences, too. For instance, the surface of the nut of the native walnuts is very rough or sculptured and the hull completely and permanently surrounds it, while the nut of the hickories is smooth and the husk is mostly in four parts, in many cases falling apart when ripe. The bark of the hickories is very hard and in some species shaggy or flaky, but in the walnuts it is rather soft and in ridges. Split a stem or twig through the middle and you will find that the pith of the hickories is solid, while that of the walnuts is in little plates. This feature of the walnuts will separate them at once from any other tree.

There is little resemblance in the woods of the two genera. That of hickory is much harder, stronger, tougher, and more resilient than that of the walnuts. In hickory the large pores are mostly grouped in a ring—ring-porous—but in walnut they are so scattered that the wood is generally classed as diffuse-porous. The advantages of color and grain are on the side of the walnuts and give them value as cabinet and furniture wood. There is a contrast, too, in the parts of the wood most valued; in hickory it is the sapwood, in walnut it is the heart.

Juglans, the classical name of the walnut tree, is a contraction of *Jovis glans*, or "nut of Jupiter," and the specific name of the species known to the ancient Greeks and Romans is *regia*, or royal, and is fittingly applied to the magnificent tree which has been so commonly planted throughout the old world for so many centuries. It is this same tree which we now call Circassian walnut and which yields one of the best known and most expensive cabinet woods on the American and European markets. The nuts from the tree, however, we call English walnuts. It is not known when Circassian walnut was first brought into the United States, but it has been widely planted for its nuts, particularly on the Pacific coast. As a source of wood, however, such plantations are wholly negligible.

There are four native species of *Juglans* in the United States, but only two, black walnut and butternut, are commercially valuable. A species of northern Mexico (*Juglans rupestris*), extends into Arizona, New Mexico, and the Rio Grande part of Texas. Another species (*Juglans californica*) occurs along the Pacific coast in California, but its range is limited and its nuts are so commonly eaten by rodents that few seedlings are found. It is, however, often cultivated as a shade tree and as stock on which to graft varieties of the English walnut.

Black walnut (*Juglans nigra*) ranges from Massachusetts to southern Ontario, Minnesota and eastern Kansas, and southward to Florida. It demands rich soil for its development and under proper conditions produces a magnificent tree. Though in the early days very common, the supply is now restricted. The great demand for it on account of its excellence for furniture, together with the fact that it usually occupied land valuable for agriculture, has largely exhausted the supply. Formerly black walnut was used a great deal for construction purposes, and many old houses in the Middle West have walnut sills and finish. The lasting qualities of the wood and the ease with which it split made it especially serviceable for rails, and even now one can find some of the old fences still in service. About 1840 a covered bridge of heavy black walnut lumber was built across Pine Creek, about four miles south of Williamsport, Ind. In all the time since its construction few repairs have been needed and when seen by the writer a few years ago the bridge was apparently as sound as ever. It was stated that iron bridge contractors had several times expressed a willingness to replace it with a modern iron span for the lumber that is in it, but the county commissioners always refused to listen to such offers.

The average production of black walnut lumber for the years 1906-1909 was about 45,000,000 board feet. In 1910 it was less than 36,500,000 feet. Although reported cut by nearly 3,000 mills in thirty different states, nearly three-fifths of the total output was from Ohio, Indiana, Illinois and Kentucky.

The following table gives the amount of black walnut consumed in one year in seventeen states and the average cost per thousand feet paid for it at the factory.

State	Board Feet	Cost per M.
Illinois	4,340,350	$ 74.00
Michigan	1,473,137	70.00
Kentucky	1,463,000	75.00
Massachusetts	743,100	98.00
Connecticut	648,650	90.00
North Carolina	591,000	41.00
Maryland	548,500	90.00
Missouri	140,608	76.00
Texas	135,000	74.50
California	112,916	158.00
Wisconsin	72,000	75.00
Arkansas	55,000	50.00
New Hampshire	9,000	63.50
Oregon	1,900	325.00
Washington	1,000	125.00
Louisiana	500	100.00
Montana	500	130.00

From the above table it is apparent that walnut is a very valuable wood. This is particularly the case of material shipped to the Pacific states. The quantity is small, but the quality is high and, being used for high-class purposes such as fixtures, the cost is great; in fact, in Oregon a maximum price of $400 per thousand is recorded. In North Carolina and Arkansas the cost is considerably lower than elsewhere, due to the greater home supply and the use of poorer stuff. A very considerable quantity of black walnut is exported.

In Canada black walnut, though native, is almost commercially extinct. It was once there, as in the United States, a very popular furniture wood, but has fallen from favor. Only about 61,000 board feet of the wood were used for furniture in 1910, one-third native grown, costing $71 per thousand, and two-thirds imported from the United States at $51.24 per thousand.

The wood of black walnut is moderately heavy, hard, strong, stiff, rather coarse-textured, mostly straight-grained, splits readily, takes a high polish with a glossy, satiny surface. It works well, seasons readily without serious checking, does not warp or twist, and holds its shape. The color of the heart is a rich dark or chocolate-brown, often somewhat variegated. The sapwood is thick in young trees but rather thin in old specimens and is grayish-white in color. Newly exposed heartwood has a characteristic odor reminding one of the fresh leaves and nuts.

The pores are comparatively large in the first-formed wood of the season, distinct to the unaided eye, and gradually diminishing in size and number toward the outer limit of the growth ring, making the wood intermediate of ring-porous and diffuse-porous. The pores are solitary or in radial groups of 2—5, often in diagonal rows. Examination of the cross-sections with a hand lens shows numerous fine tangential lines of wood parenchyma.

The past uses of black walnut were almost unlimited. With scarcity and high cost the uses have become decidedly restricted. It makes excellent furniture but is not striking enough in appearance to appeal to the present American taste. It has long been a favorite gunstock wood but is giving place to birch and red gum to a very considerable extent. Pieces cut from root burls and from stumps have very rich figure and will always be in demand at high prices.

Butternut or white walnut (*Juglans cinera*) is widely distributed throughout the eastern half of the United States but is most abundant on the western slopes of the Alleghany and Appalachian mountains, and in Wisconsin. It is mostly a medium-sized tree, often of very poor timber form, and has never been very plentiful. The trees are quite readily distinguished from black walnut by the lighter color of the bark and by the elongated nuts with sticky velvety hulls. The wood, too, is different, being light, soft, not strong, odorless, and colored light chestnut-brown with dark tangential zones. Some of the grades of butternut are remarkably similar in general appearance to the less highly figured specimens of Circassian walnut. Usually, however, the rich shading of the Oriental wood readily distinguishes it from the humble butternut.

Butternut wood is very easy to work and when found in sufficient quantity has numerous uses. The largest consumption of the wood in 1910 was reported from Wisconsin, where, out of a total of 610,000 feet, 500,000 feet were made into boxes. The remainder went into church and school furnishings, interior trim and woodenware. Of the 183,000 feet used in Illinois nearly half was for incubators, the remainder going into furniture, cabinet work, novelties and toys, and store and office fixtures. Other uses are coffins, ship and boat-building, molding and slack cooperage.

The total amount of butternut cut annually is too small to be reported separately by the Bureau of the Census.

The genus *Hicoria* is confined almost entirely to the eastern half of the United States. While some botanists recognize as many as 15 species, economically considered there are only 8, which may be separated into two groups—the true hickories and the pecan hickories. In the pecan group are *Hicoria pecan* or true pecan, *H. aquatica*, the water hickory or bitter pecan, *H. myristicæformis* or nutmeg hickory, and *H. minima* or bitternut. The first three species are restricted in range to the Mississippi valley and Gulf regions, but the bitternut is extensively distributed throughout the eastern United States. The pecan hickories grow faster than the true hickories but their wood is generally inferior, being comparatively weak and brash, and seldom appears on the market. Nutmeg and water hickories are characteristically shaky. The best quality of second growth bitternut and nutmeg, however, is better than the average of shagbark and pignut. Strength and toughness vary greatly within the same species.

The four true hickories of commercial importance are *H. ovata* or shagbark, *H. laciniosa* or big shellbark, *H. glabra* or pignut, and *H. alba* or mockernut. With the exception of the big shellbark, which is confined to the Ohio valley, the trees of this group are widely distributed throughout the eastern United States. Shagbark and pignut furnish the bulk of the hickory of commerce.

The following table affords a comparison of the different species in reference to size of the trees and the density of their wood.

Pecan Hickories

Common name	Average diameter, feet	Maximum diameter, feet	Average height, feet	Maximum height, feet	Specific gravity	Weight per cubic foot, pounds
Pecan	2	6	80	170	.72	45
Water	1.5	3	60	80	.74	46
Nutmeg	1.5	4	75	100	.80	50
Bitternut	1.5	3	65	80	.76	47
True Hickories						
Shagbark	2	5	80	140	.84	52
Big Shellbark	2	5	75	130	.81	51
Pignut	2.5	5	80	130	.82	51
Mockernut	2	4	75	120	.82	51

The true hickories are rather slow growers but produce wood that is heavy, hard, strong, stiff, very tough and resilient. No other commercial wood known combines these properties to so great a degree. The wood is not remarkable for beauty of color or of grain, shrinks badly in drying, is not durable in contact with the soil, and the sapwood is very liable to attack by insects, especially by powder-post beetles. It is hard to cut and heavy to haul and there is usually great waste at the mill. Rough stock is always shipped green.

The sapwood of hickory is white and thick, the heartwood dark brown or red. Transformation of sapwood into heart affects neither the strength nor toughness of the wood. The best wood is obtained from trees in their prime, the youngest trees being the toughest. The best criterion of the value of the wood is its weight.

Of all the hickories the pignut is the strongest, toughest, most uniform for all regions, and has the largest proportion of sapwood, though the shagbark is but slightly inferior to it. Big shellbark is of only medium strength, but is inferior to no other species in toughness. Mockernut is somewhat stronger than big shellbark but lacks toughness.

In hickory wood the pores in the spring wood are moderately large, not abundant, and usually in a very irregular zone. When growth is very slow the wood appears diffuse-porous. The pores in the summerwood of the growth rings are isolated or fairly evenly distributed, thick-walled, and comparatively large. The rays are abundant but not conspicuous. One of the most characteristic features is the presence of numerous fine but distinct white tangential lines of wood parenchyma, particularly in the summerwood. This character is sufficient to separate the wood from ash in event of any confusion due to the similarity of uses, particularly handles.

No constant characters have been found whereby the woods of the various species can be separated with any degree of certainty. The woods of the true hickories can usually be told from those of the pecan group by the fact that in the former the wood fibers are thick-walled, producing a very hard, heavy, tough and strong wood, while in the pecan group they are comparatively thin-walled, thereby reducing the weight, strength, density and hardness. Of the pecan group the water hickory (*Hicoria aquatica*) can usually be separated from the others because its growth rings are not clearly defined and the large pores are not in a well-defined zone, but scattered much the same as if diffuse-porous.

There are many uses of hickory for which no satisfactory substitutes have been or probably ever will be found. About two-thirds of the total cut is consumed annually in the vehicle industry for

spokes, rims, poles, shafts, single-trees, double-trees, spring bars and axle caps. There is also a strong demand for hickory for sporting goods, dowel pins, whip stocks, hames, sucker rods, mower pitmans, skewers, and many other purposes. Nothing compares with it for tool handles except in less exacting cases, where white ash and sometimes oak are employed.

Kentucky surpasses all other states in the production of tool handles, including those for axes; railroad and mining tools, such as picks, drill hammers and sledge hammers; also mauls and smaller tools like hatchets and chisels. In 1909 nearly forty-six per cent (31,350,000 feet) of all the hickory utilized in manufacture in Kentucky was converted into handles of one kind or another. This amount is equal to nearly one-sixth of all the hickory reported by the sawmills in the United States in 1908. Of the amount used in the state only one-third was native grown.

Hickory timber is getting so scarce or is so scattered and inaccessible that the question of continued supply has become a matter of serious concern to manufacturers. Improved methods of utilization and the reduction in the use of hickory for purposes to which other woods are better suited will prolong the present supply and the increasing values of the hickory wood will stimulate the growing of new trees. Since heartwood is not a desirable feature, it does not require very many years for a hickory tree to become of merchantable dimensions.—J. R. S.

Doing the Thing Just Right

An efficiency engineer, to use the term created by the demand for scientific methods of management and manufacture, was recently quoted in a trade journal as saying that he could make a better showing in woodworking factories, as a class, than in any other single industry. Doubtless he meant to include lumber plants in the same category. Assuming that this is the case, the question naturally suggests itself as to why the manufacture of forest products and their conversion into finished articles should be conducted upon a lower plane than, say, the production of pig iron from the ore and the manufacture from it of steel and castings and machined products and scores of other commodities figuring in the commerce of the world.

There are doubtless many reasons that could be cited as partial answers to the question; yet one of them which seems to come nearest the truth, and to summarize the situation most accurately, is that the lumber business and its allied industries appear to be operated on too much of a personal basis. That is to say, it is largely an empirical process; or, to get away from the vocabulary of the philosophers, everybody does the thing according to his lights, and not, as a rule, following any standard which has been creosoting disposing of waste by distillation, and the development of by-products and the like.

The fact that logging and lumbering are often carried on in isolated communities, so that the superintendent of a mill may have little opportunity to observe the methods used by his fellows, might account for this to some extent; but then there are plenty of sawmill towns in which from half a dozen to a score of mills are located, without all of them, by any means, using the same ideas in their operations. Of course it is true that the business has been undergoing many changes during recent years, with the introduction of new processes, such as curing by steam under pressure, rendering wood proof against atmospheric conditions by creosoting, disposing of waste by distillation and the development of by-products, and the like.

But this very fact ought to operate to help to create and maintain standards, rather than the contrary, since every lumberman should realize that with new ideas coming into use it is up to him to select the best and apply them to his own business. He ought to compare the practice in his own mill with that of the best of other people; and by a process at once analytical and synthetic arrive at a composite result which will include part of his own original scheme and part of the plans in use elsewhere.

It is true, as most hardwood men will readily admit, that there is a considerable lack of uniformity of practice on subjects which ought to be thoroughly understood by the trade at large, and on which there ought to be unanimity of opinion and consequently standardization of practice. Yet in every gathering of lumbermen where a discussion of business methods comes up, it is found that there are wide variations in methods, all the way from the stump to the car.

There has been perhaps too little definite effort to compare notes. Everybody getting fair-to-middling results has been rather prone to be satisfied, without going to the trouble to determine whether even better achievements could be recorded. Of course there are occasionally found plants which are obviously down at the heel, poorly managed, inefficient, with outworn methods that no one would adopt; but on the other hand there are mills where the most up-to-date plans are in effect and where the best of results are being secured, without many others in the trade seeking to learn of and adopt them. The rank and file are too easily contented; are inclined to look too hard at the larger outlines of the proposition, such as the day's cut and the size of the payroll, and to neglect study of the vital facts lying beneath the surface of the everyday operations.

To give a more definite idea of the point which is to be made, consider a moment the soda-dipping process which has won some favor in the South among manufacturers of gum. Many plants are using this system successfully, and thereby getting rid of the tendency of gum to stain and discolor. Others, however, have not been so fortunate, and have accordingly announced that the system is a failure.

In a majority of cases, it is likely that failure to get the proper results has been due to lack of the proper system in using the idea. Too little attention has been given to the details of its application, with the result that the process has not had the proper chance to show its effectiveness. To prove this, a Louisiana sawmill man said only recently that he visited half a dozen different plants where soda-dipping is practiced before he found one that was using a carefully worked out and scientifically operated plan. It was getting fair results all the time. He adopted this plan and has been similarly successful, although there are other manufacturers near him who still insist that their gum is not thoroughly conditioned by the use of soda-dipping.

Before going further it may be just as well to state the details of the plan used in the plants referred to. They employ a seven-to-eight per cent solution of soda, and high-grade soda should be used. In many cases effort to secure economy by buying a cheap variety of soda has been followed by indifferent results, quite naturally. Of course there is a temptation to reduce the expense wherever possible, and when it is necessary to buy material in carload lots, with a big bill for material to be paid, the opportunity to save a little looks pretty good. But obviously, if it is found that the best results can be had only with the best grade of soda, it is poor economy to stint at this point.

The use of a hydrometer is also emphasized as necessary to success. The object of this instrument, of course, is to determine the strength of the solution, and to keep it strong enough at all times to do the work. Some sawmills which have attempted soda dipping have attempted to get along without hydrometers; just as some panel plants have made an effort to operate without thermometers on their glue-kettles. In both cases an extremely important matter is left to chance.

It is desirable, also, to keep the temperature constant. The proper temperature, it is agreed, is about 160 degrees Fahrenheit.

A thermometer should be kept in the tank in order to determine whether or not the temperature is being properly maintained. The use of these two instruments is one of the principal safeguards, and will go a long way toward insuring complete success.

The arrangement of the tank within the mill is also desirable, so that the lumber can be run through the solution while on the chute. The chains can be so arranged that when a wood which is not to be dipped is being cut, connection with the tank can be cut out and the lumber proceed as usual. It has been noted that the location of the soda dipping tank varies considerably, and it ought to be an easy matter to determine just which is the best place, and then locate it there uniformly.

"We find that soda dipping costs us about ten cents a thousand feet," said one of the successful manufacturers in the gum country. "This is pretty high, compared with the results reported by some other lumbermen. However, if we can get good lumber and avoid staining at a cost of ten cents, we are willing to pay it, especially as some mills where six or seven cents is the cost per thousand have not been able to get uniformly good results."

As indicated above, those who have had most success with new ideas have made a point of visiting mills where the processes are in use, examining them thoroughly and then adopting the ideas bodily, if they have proved successful. The point is that personal inspection of this kind is extremely valuable, and the survey of a number of plants, with a compilation of the results at each mill, is sure to be suggestive and helpful. Practically every sawmill man, of course, is willing to give others in the business all the pointers he can from his own experience; so that pooling the results gained by everybody and evolving a standard method which will be available for all is by no means impracticable.

This idea of doing the thing right in all of its various details becomes a matter of importance, especially in connection with the use of expensive equipment. For example, the writer knows of a certain lumber company which is thinking of installing a system for curing lumber by steam under pressure. In order to know just what it could be expected to do, he visited several plants where similar systems were in use; but he found that irregular methods were being used, uniformity of operation, even in a single plant, was lacking, and consequently the imperfect results reported by one or two concerns were obviously, or at least apparently, caused by failure to carry out the idea exactly. Hence the experience of the present users of this system cannot be relied upon absolutely by the man who is trying to get at the facts.

Lumbermen will make great strides in the business of producing the best lumber for the least money when they learn that standardization is the big principle back of most industries; and that personal idiosyncrasies and peculiarities ought to be eliminated and the work done in exactly the right way, that way to be determined by the experience of all, and applied by all.

G. D. C., Jr.



The Flood Situation



The popular interest in the flood situation has been shifted during the last two weeks from the middlewestern states to Arkansas, Mississippi and the other states bordering on the lower Mississippi river. On the whole the situation appears far more favorable than had been anticipated. Conditions are rapidly righting themselves in the middlewestern states.

At Louisville the flood situation is practically a matter of history. Most of the large lumber concerns in that city are well straightened out and are getting their lumber re-piled in good form. One of the most serious features of the flood along the Ohio was the fact that thousands of logs were carried away from various points along the river. It is hardly probable that there is any chance of recovering any of the logs carried away as in most cases the booms were completely demolished.

At Cincinnati incessant rainy weather following the flood made it extremely difficult to accomplish much in the way of cleaning up stock and re-piling. Most of the Cincinnati yards so secured their piles with booms before the floods came that practically nothing was actually carried away. Efforts are now being concentrated on straightening up piles and cleaning up stock.

The main effect the flood situation had on the Pittsburgh trade seems to have been in the matter of affecting its business with outside yard concerns and getting their supplies from Pittsburgh. The impossibility of readjusting the yards and the business details up to this time have resulted in holding off shipments on a great deal of stock which would have gone out some time ago.

Weather conditions in the Memphis section during the past few days have been quite favorable, and this has been a factor which has been of much service to lumber interests. There is a great deal of low land in the Mississippi valley which is under water and in which practically nothing can be done; but there is considerable timber which is so located that it can be gotten out, and this work is making reasonably good progress. The excellent weather, too, has facilitated the production of hardwood lumber at those plants not interfered with by high water in the Mississippi and its tributaries.

There is no doubt that production has been considerably curtailed as a result of the flood conditions in the Mississippi, but the fact remains that conditions are much more favorable in several important respects than last year. In the first instance the mills were well supplied with timber and those not interfered with by the high water have been able to continue operations. In the second place the flooded area has not covered anything like as large a territory as was the case last year. In the third place those mills which have not been interfered with by high water have been able to continue shipping, as there has been comparatively little interruption to the handling of both inbound and outbound shipments. In the fourth place, lumbermen profited by their experience of last year and in the majority of instances removed their timber to higher ground, thus placing it where it would be out of danger of overflow. There are perhaps some other respects in which conditions are better this year than last, but these are the principal phases of the situation.

There is no doubt that there has been a very decided curtailment of the output in this territory even though it has not been as large as last year. A number of mills have been closed down at Memphis proper, as indicated in the last issue of the HARDWOOD RECORD, and the number closed down at points outside of Memphis is being increased as the levee breaks at new places. Plants are now out of commission at Wilson, Madison, Turrell, Proctor, Marked Tree, Earl, Blytheville and at a number of other points in eastern Arkansas. On the Mississippi side, however, there have been no breaks in the levee system so far and the consequent interference with lumber production has been unimportant. Some emphasis is being laid upon the effect of this restriction of production upon prices. It is generally conceded that the market will work to a higher level before it is possible to bring stocks back to normal conditions.

An additional element in the price making factor is the large demand for hardwood lumber as well as for building materials of all kinds from the flooded districts in Indiana, Illinois, Ohio and other states. The call for hardwoods is more aggressive than it has been for quite a while and those firms which are not interfered with by high water and which have their stock clear are making shipments on as liberal a scale as possible. A number of firms here, which are handicapped by the high water or impaired switching facilities, are having to turn down business every day. They foresee marked activity, however, as soon as they are in position to take care of shipments promptly.

Another serious feature of the situation is seen in the fact that as a result of the floods and rains following their recession, the country roads are impassable, and the hauling of logs in and of lumber out has been seriously checked.

Tales of the Trade

THE ORIGINAL CUBIST

Since the daily papers and leading magazines nowadays are full of stories of the discovery of the peculiar, alleged artistic value of the work of the cubists, it may not be amiss to repeat the accompanying picture which was published in HARDWOOD RECORD some months ago as showing who the original cubist artist really was. It is J. V. Hamilton of Fort Scott, Kans., and his system of making cubist pictures apparently is of much higher artistic value than any that have been exhibited at the sundry art shows in New York and Chicago recently.

This particular picture is made from sections of veneers and it is a composite portrait of the veneer men of the United States worrying over how to catch up with current orders. Mr. Hamilton is really entitled to the distinction of being the Simon-pure original cubist artist of the country.



A LA CUBIST.

A "BILLY" DINGS STORY

W. W. Dings, of St. Louis, tells a story on himself. It was probably not intended for publication, but is too good to lose.

Billy dropped into a chair at a swell barber shop recently for a shave, and as he seated himself his eye caught a glimpse of a very alluring bit of femininity occupied as a manicure artist at his right. Billy is not adverse to glancing at the personal pulchritude of womankind either in a barber shop or out of it, and unconsciously, of course, he occasionally turned his head for another view.

The barber was of foreign extraction, and eventually stopped his work, and going out to the middle of the room turned a cheval glass so it faced Mr. Dings, and coming back made the following suggestion:

"If ze gentleman will observe, he can view ze lady in ze glass, vitch vill make it less possible that I cut his throat."

Billy immediately sat up and took notice.

DELIVERED THE GOODS

Some time ago a Minneapolis lumberman happened to be in the office of Jack Hayden, secretary of the Northwestern Hardwood Lumbermen's Association and connected with the Mississippi Valley Lumberman, and mentioned to Jack that if the Lumberman had any spare copies of the Congressional Record he would like to have them.

A number were left at his office from time to time and finally a messenger appeared with two huge rolls of unopened Records neatly tied up with rope. Receipt of same was acknowledged to Mr. Hayden by the following letter:

Hon. Jack Hayden.
Washington, D. C.

Honorable Sir:

Permit us to express our hearty appreciation of the small favor (?) extended to us in sending "Congressional Records" since the foundation of the Government. These documents shall be given a large place in our office and in perusing same, should the writer chance to stray across the path of some fool statesman, he will think of you.

I may, in the future, have an office on the ground floor of some building, and should this occur, will advise you, so that all future deliveries may be made by furniture van, or possibly it will be better for me to secure trackage facilities.

I should like at some time to vote for you, having the highest regard for the man who "delivers the goods" and if there is any bright meteor which has illuminated my pathway in life, and can deliver the goods in wholesale quantities, you are it.

Dear Jack, believe me to be, yours with a heart full of thanks, and an office full of truck.

Jack has never repeated the offense, while the aforesaid lumberman has congratulated himself a number of times on his ability to head off such attempts to make a store-house of his office.

"SOME MASHER."

Last summer F. E. Miller, traveling representative of the Gayoso Lumber Company, Memphis, Tenn., decided to make headquarters at one of Minnesota's delightful summer resorts and finally located quarters for himself, wife and child at one of the hotels on Lake Chisago.

Mr. Miller and family arrived at the hotel, which is located on an island, late in the evening and were shown to an upstairs room in the main building. He states that having had a strenuous day he was very tired and hastily undressing threw himself upon the bed. It is necessary to state here that Mr. Miller belongs, dressed or undressed, in President Taft's class for size and is not of a build calculated to safely drop from any extended height, and in this case when he let himself go in the abandon of luxurious freedom from conventional trappings, the bed capitulated at once and, as Mr. Miller graphically stated, "The whole condemned thing went down and the head of the bed also fell over on me with a crash similar to the Republican defeat last November."

He states, however, that he was so overjoyed at not going through the floor to the basement that he and his wife spent the balance of the night in thankful prayers that the catastrophe had been no worse, and he did say that he could overlook the bed falling, but thought insult was added to injury when he was smashed on the noodle by the head of the bed.

Memphis lumbermen with whom Mr. Miller is very popular and who have heard of his experience have advocated his concern providing him with a rope and tackle for easy entrance to future country beds.

The Camphor Industry

The world's production of camphor is placed at 12,000,000 pounds, of which Japan supplies 6,000,000, most of which is produced in Formosa. China produces 1,300,000 pounds. Synthetic camphor, which is manufactured largely from turpentine, is now an important article in the camphor market. Genuine camphor is made from finely-chipped wood, and involves the destruction of the trees.

Review of Forestry Work

The Forest Service has published a pamphlet, "Review of Forest Service Investigations, Volume 1," which is a departure from publications heretofore issued. It is stated in the preface that it is intended primarily for those engaged in forestry work, but that a limited number of copies will be distributed among others who are interested. The pamphlet gives an account of what the Forest Service is doing and expects to do. Those who examine the pages will be surprised to learn the scope of the work and the wide range of subjects which it covers. There is activity from Maine to California, and from Florida to Minnesota. A good many matters are discussed informally, which have not been treated in regular bulletins. It is, in fact, what might properly be called a progress report. It is proposed to issue others from time to time as suitable material accumulates. It may be expected that good results will follow, because the Forest Service has grown so large and its activities are so varied that some such means are necessary to keep all parts in touch.

Utilization of Hardwood Waste

Editor's Note

The following article was read by R. B. Goodman of the Goodman Lumber Company, Goodman, Wis., before the meeting of the Northern Hemlock and Hardwood Manufacturers' Association held at Milwaukee, April 23. The article is an able analysis of the possibilities of closer utilization, considered strictly from the viewpoint of a practical lumberman.

First of all, I desire to call your attention to the fact that in speaking of hardwood waste we do not mean an economic waste at all, but simply despoiled or left-over material. If the producing of something valuable out of this material can be done at a profit, it should be saved, but it must be remembered that the waste material is something tangible and evident to the senses, whereas the labor that may be expended in rendering this waste material valuable is often illusive and intangible, and unless the operation has an accurate system of accounting, the efforts to save waste material may easily cause a greater waste of labor.

The problem of utilizing waste material is largely a problem of more efficient processes of labor, and results are often so misleading that all of us occasionally find ourselves handling waste material in one way or another at an actual loss. The amount of waste material, however, accruing from the manufacture of hardwood lumber is so great that we feel the necessity of making some effort toward its utilization.

This waste material takes place, first, in the woods; second, at the mill; third, at the place the lumber is consumed.

In this paper I shall discuss only the first two of these sources. The waste in the woods is the greatest in bulk. Our specifications for logging birch and maple are 8" surface clear for birch and 10" surface clear for maple. Since we adopted these specifications the value of birch and maple has increased over $5.00 per thousand, and it occurred to me that this advance would enable me to cut my logs on a much harder specification, both as to size and character of the log.

We made interesting experiments in this line. We reduced our specifications to 7" and up for birch and 8" and up for maple, and included a fairly hard grade or No. 2 log. This difference in the specification increased the cost of logging from $1.00 to $2.00 per thousand. The smaller and rougher logs decreased our cut at the mill some twenty per cent, with a consequent increase in cost of sawing of that amount. The larger percentage of low-grade lumber decreases the average value of the product of the log, so that by endeavoring to utilize the poorer logs in our forests, and thus to decrease the waste of material in the woods, we virtually increase the cost of our lumber more than $5.00 per thousand; and if we had had any means of determining the actual cost of manufacturing the poorer logs into lumber, it would probably have amounted to four or five times the value of the product obtained, so we have come to the conclusion that with our stand of timber 8" and 10" surface clear limits for logging birch and maple are the limits of economy. These specifications take not more than from thirty to thirty-five per cent of the weight of the wood from the land, or from sixty-five to seventy per cent of the weight of the material in our forests is left on the ground as having no economic value.

The second source of waste material is at the mill—saw kerf, slabs, edgings and trimmings. The modern band saws have reduced the waste of saw kerf to less than half of what it was with the circular saw—in other words, it has been reduced from twenty per cent to about eight per cent. If anyone is sawing lumber with a circular saw, he can save the price of a band mill in saw kerf in a year's sawing.

More careful sawing or the use of slab resaw has reduced the waste of material from slabs, and careful attention to edging and trimming, the use of odd lengths in lumber, the crowding of wane and bark into low-grade crating and box lumber has still further reduced the amount of waste in sawing up the log.

In hemlock, basswood and elm, a percentage of the waste of slabs and edgings is utilized for lath and squares, but when all these things are taken into consideration, there is still over a cord of refuse to a thousand feet of lumber. Approximately two-thirds of this goes into fuel as sawdust and hog feed, and one-third is available for other uses—that is to say that approximately fifty per cent of the weight of the merchantable log goes into lumber, thirty per cent into fuel, and twenty per cent into wood available for other uses.

If these percentages of waste are approximately correct, you will see that the lumber produced from the hardwood forest is fifteen per cent of the weight of the standing timber and that this is under the most improved modern conditions of manufacture. If the birch and maple yield sixty per cent merchantable lumber against forty per cent No. 3, the merchantable lumber would be approximately nine per cent of the weight of the material in the standing forests.

The utilization of this waste material so that we obtain a value from it in excess of the labor expended on it, is a problem with as many different solutions as there are different hardwood operations. If the mill is located at a remote distance from the timber and freight is paid on the logs, it is obvious that the possibility of bringing in a greater proportion of weight of material from the standing timber is largely reduced. Mills that are located at a remote distance from the timber are usually in large towns or cities, and the waste material at the mill is more available for sale as fuel than for any other purpose. When the mill is located in the heart of the timber, as our mill at Goodman, we have found that after selling a small amount of our mill waste for local consumption as fuel, we have reached the end of our resources, for the best prices that we have been able to obtain in the larger cities for short wood have not compensated us for the actual cost of handling same from the mill to the car; and while we have made no experiments of our own, we have offered for the past four years, and are still offering, to finance any reasonable proposition submitted to us for the manufacture of our refuse into any of the numerous articles of commerce made from small pieces of wood—all the way from dowel pins to pail handles. All the propositions that have come to us, however, have been impracticable, the cost of labor involved precluding any possibility of profit, and while there are many specialties in hardwood, such as broom handles, special material for the manufacture of furniture, agricultural implements, tenpins, billiard cues, etc., nearly all of these specialties require not the refuse material but the pick of the logs.

We have tried to solve the problem of utilizing a larger proportion of waste material in the woods, and practically all of the waste at the mill in birch and maple, by erecting a chemical plant at Goodman for destructive distillation. This plant is of the oven type. Plants for the destructive distillation of hardwood in this country are of three types—the small retort plant, in which the wood is packed in small iron retorts and then charred; kiln plants, in which the wood is charred partly by its own combustion; and oven plants, in which the wood is loaded on iron buggies and shoved into large iron retorts or ovens. Our plant has six of these large retorts, each holding eight cords of wood at a charge, or a daily capacity of charring forty-eight cords of hardwood. This plant, with its adjacent wood yards, system of track and the installation of boilers and pumps for supplying steam and water, cost approximately $200,000, and the preparing of chemical wood and other requirements of operation require a working capital, in addition, of $25,000. The returns from this plant, after a fair deduction for depreciation, show a profit of between six and eight per cent, and the prices at which we are supplying this plant with hardwood leave a margin of profit of approximately $1.00 per cord. As the compensation,

however, allotted to the production of the wood fluctuates with the market value of the chemicals produced, and as the chemicals are all now at a high value, we do not figure more than a return of fifty cents per cord for stumpage over a long period of years.

The requirements of wood for the retorts are very exacting. Only the heaviest slabs and edgings can be used, and it is impossible to use wood containing excessive doze or streaks of rot; the wood must be split so that it does not exceed 6" in thickness or 12" in width; the wood must be all hardwood and seasoned for one year before it is ready for use. We have found serious difficulty in getting out this wood by the old method of wood choppers working in the timber. These difficulties are: scarcity of expert labor and its inferior quality, the necessity of constant and rigid inspection of the wood, and, after the wood is out, the risk of fire during the year it has to stay in pile for seasoning. The labor required to haul this wood and load on cars is as great as the original chopping, and to these items of risk and expense we add the necessity of leaving in our logging spurs for a year longer than would be required for logging only, consequently requiring a double amount of steel for this purpose.

On account of these objections we early came to the conclusion that it would be cheaper to manufacture the chemical wood at the mill. We cut the chemical wood in log lengths—i. e., we log the land clean, leaving only saplings under 5", dozey trees, and tree tops. We bring this chemical wood to our mill with our merchantable logs, sorting at the mill and running the rough and small logs to the wood mill, where they are butted to 50" and run through split saws to be cut into sizes complying with retort wood specifications. The heavy slabs and edgings are conveyed so as to mix with the output of the wood mill, and the wood is piled on cars at the mill and taken to the chemical wood yard, where it is piled to dry and season.

This process, being mixed with our regular operation, is obviously one in which it is difficult to determine actual unit cost, but we believe that this method is cheaper, and certainly more reliable, than chopping in the woods, and it enables us to utilize wood that the choppers are unable to split by hand. The wood mill, however, is an additional investment.

The operation of a retort chemical plant, while comparatively simple, requires a few highly skilled men and great care in the regulation of its operation. Our plant has an installation of one 1,500-gallon pump for pumping water for the condensing of the vapors, and five 150-horsepower boilers for supplying steam for distillation. A switch engine is required for shifting the wood cars and pulling the retort buggies. The labor required for all departments aggregates ninety men. This includes extra force in the woods, wood mill crew, wood handlers, firemen, and the men handling the products in operating the plant.

Products of the plant are approximately as follows: Per cord of wood, 50 bushels of charcoal, 11 gallons of 82 per cent crude alcohol and 160 pounds of acetate of lime. These products, with the exception of charcoal, are easily marketable under normal market conditions. The difficulty with the charcoal is that the domestic market within shipping radius of our northern hardwood operations is so narrow that it is impossible to depend upon it, and our chief wholesale use of charcoal is in the manufacture of charcoal iron. Owing to its low value and great bulk and its tendency to spontaneous combustion, it is impracticable to ship charcoal in bulk for any great distance by rail, so that the second step in the process of utilizing chemical wood is the erection of a blast furnace, unless there is already one near enough to the operation to contract for its output. The other products, alcohol and acetate of lime, while being capable of shipment for long distances, and even available for export, are chemicals for which there is not a very large demand in the arts. Wood alcohol has to compete with the more cheaply manufactured and more widely denatured grain alcohol, and only a slight stimulation to the production of acetate immediately reduces its price. In the course of the past five years the total value of the charcoal, alcohol and acetate produced from a cord of wood has fluctuated from $6.00, with practically no demand, up to a total of $11.00. Our costs per cord, carbonized, are about $8.50. As the weight of a cord of wood is approximately equal to a thousand feet of lumber, and we are obtaining a cord of wood for each thousand feet of lumber manufactured, it will be seen that we are utilizing twice as much of the material in our hardwood forests as we were in the manufacture of lumber alone. Our own plant is the minimum in size that it is practical to operate; plants twice or three times its size are better suited to economy of operation. It would follow, therefore, that the requirements for even the smallest chemical plant are as follows: First, a mill located near the timber, the available hardwood timber to be at least twenty years' supply at the rate of 10,000,000 feet of hardwood per year; second, sufficient supply of running water; third, proximity of charcoal iron furnace.

With these conditions met, the mill in the woods can make as great a profit out of its hardwood refuse as the mills in the larger towns by disposing of their wood as fuel.

Traffic Matters Around Memphis

John W. McClure of the Bellgrade Lumber Company, James E. Stark of James E. Stark & Co., and J. R. Walker, representatives, respectively, of the Lumbermen's Club of Memphis, the National Wholesale Lumber Dealers' Association and the Southern Hardwood Traffic Bureau, have been in Washington recently, attending the conference with the Interstate Commerce Commission in connection with the subject of uniform methods of weighing lumber and other commodities and government supervision of this very important work. The Memphis representatives at this conference have gone with instructions to advise the commission that they favor government supervision and the installation and operation of track scales because of the belief on their part that the question of weights is as important a factor in determining freight cost as rates themselves. The commission has had this subject under consideration for a number of months and asked for this final conference before handing down a decision in connection therewith.

May 14 has been set as the date for oral arguments in the case of the Southern Hardwood Traffic Bureau against the Illinois Central and the Yazoo & Mississippi Valley roads, involving the proposed advance of two cents per hundred pounds on hardwood lumber shipments from Memphis and Mississippi points to New Orleans. This advance was to have become effective April 1, but it has been suspended by the commission until September 30. The Southern Hardwood Traffic Bureau will be represented by J. R. Walker, attorney for that organization, but a number of prominent members of the hardwood fraternity at Memphis and in the Memphis territory will go to Washington to participate.

Another question involving rates on export shipments is that of the Anderson-Tully Company et al vs. Morgan's Louisiana & Texas Railroad et al. This affects the movement of export shipments of lumber from points west of the Mississippi river by way of New Oorleans. There have been several hearings before the Interstate Commerce Commission in connection with this case, in which the Southern Hardwood Traffic Bureau asked the commission to hand down an order forcing the railroads west of the Mississippi to issue through bills of lading on such shipments. The western lines, with one exception, announced that they would issue such through bills, but just at this juncture the members of the New Orleans hardwood trade filed an intervening petition in which they set forth the statement that the issuance of such through bills would discriminate against them and in favor of outside exporters. It is hoped by members of the trade here that the hearing in this case, which comes up at Washington May 10, will be the final one. Lumbermen here have been confident all the while that they would receive a favorable verdict at the hands of the commission. Particular emphasis has been laid upon the fact that no discrimination is made against exporters at New Orleans by those living outside, as the former have the right to bring in their lumber on through bills as well as the latter.

Hemlock and Hardwood Men Meet

On Wednesday, April 23, the Northern Hemlock and Hardwood Manufacturers' Association met in the regular quarterly meeting at the Hotel Pfister, Milwaukee, Wis.

Following the reading of the minutes, the treasurer reported that the balance on hand April 19, 1913, was $3,304.71.

Secretary R. S. Kellogg then delivered an extemporaneous report. He said that a month ago a letter was sent out asking the members for opinions as to the most equitable commission to commission men handling the members' products. He said that the commission men suggested that a straight payment of $7.50 a car on hemlock would be just. The consensus of the members was that a better way of arriving at payment would be on a thousand feet basis, and thirty-five cents a thousand was a very fair commission. The matter was referred to the bureau of grades, which decided not to make any recommendations.

The secretary then analyzed the stock report published in another part of this issue of HARDWOOD RECORD. He stated further that since April 1 the association members have shipped twelve per cent more hardwood than was cut during that time. He further said that ten per cent less of hemlock is now being shipped west of the Mississippi river than was shipped two years ago.

W. G. Collar, chairman of the railroad committee, reviewed the recent transit ruling of the Interstate Commerce Commission. He said that the railroads' suggestion on transit rates on logs in Wisconsin is that present rates are satisfactory, but that if in the future they prove not to be, the matter will be taken up for a change.

Mr. Collar recommended the appointment of a committee to consider the matter of creating a traffic department for the association, stating that traffic departments of other associations are doing very satisfactory work.

J. E. Rhodes, secretary of the National Lumber Manufacturers' Association, talked very interestingly regarding the "Blue Book" published by his association. He said that it is now on a self-sustaining basis and that its facilities have been enlarged and made more efficient. He said that it will become the biggest work of the association. Mr. Rhodes reviewed the Pridham case hearing at Chicago. He stated that the testimony of the fiber box people was delivered mainly by shippers and not by receivers, hence they were partial to the fiber box. He further stated that these shippers were mainly handlers of light commodities. The testimony, according to Mr. Rhodes, established the fact that fiber boxes are inefficient for contents weighing more than forty pounds.

Mr. Rhodes said that the two weeks given by the commission for the gathering of rebuttal testimony by the lumbermen will be up on April 28. He said they are getting evidence from all classes of receivers of freight all over the country, and that the fight will cost an immense amount of money.

Regarding railroad car weights, Mr. Rhodes stated that the Interstate Commerce Commission may appoint supervisors over railroad scales in weighing, but that the work surely will be done by the railroads themselves.

Regarding timber tax, he said that the foresters throughout the country have come to realize that a more equitable system of taxation is necessary to conservation on the part of the lumbermen. Mr. Rhodes said that the attitude of the daily press has been very much improved in the last year or two.

Regarding the market, the speaker said it is strong, with the exception of some hesitancy on account of some pending legislation at Washington. He said that the lumber manufacturers are generally apathetic regarding the removal of the tariff on lumber. According to the speaker, the west coast manufacturers do not fear the tariff, because they anticipate a greatly broadened market opened up through the Panama canal. He said further that the chief difficulty has been in securing return cargo, but that it is likely that they can ship considerable hardwoods to the Pacific coast on return trips.

Secretary Kellogg read a letter showing statistics of Michigan cut, and W. A. Holt then read the report of the legislative committee.

T. A. Green, reporting for the Michigan legislative committee, said that keen apprehension is felt regarding the ten-hour day law for work in the woods.

The first business taken up in the afternoon was the report of the bureau of grades and inspection, M. J. Quinlan, chairman. He said that answers to a query as to the opinion of the members regarding the inspection service showed that ninety-seven per cent of the membership endorsed it strongly and unqualifiedly. Regarding market conditions the speaker said there is practically no dry hemlock at any of the mills of the association members. He said further that hardwood cut is already mostly under contract at good prices.

Regarding desired changes in certain hardwood rules of the National Hardwood Lumber Association, Mr. Quinlan said that the changes advocated by northern manufacturers last year will again be presented at the Chicago meeting of the National association in June. He said that the National association rules committee met January 15 and reported to directors, proposing the changes advocated last year. Mr. Quinlan said that he anticipated the changes would go through, but that every member should be present to register his vote.

A suggestion that the secretary should issue report blanks for reports on the amount of the various thicknesses and grades of hardwood lumber on hand at the end of each month received considerable discussion, and its value was spoken of by several of the members. The matter was referred to the grading commission.

F. F. Fish, secretary of the National Hardwood Lumber Association, issued an invitation to the membership to attend the meeting of his association at Chicago, June 5 and 6. Mr. Fish said that in the last year the National Hardwood Lumber Association has entered the market of New York very strongly and that it now has as members the majority of the trade of that city.

T. A. Green then read the following paper:

Logging by Steam

From 1900 to 1907 labor conditions in the woods, especially in Michigan and Wisconsin, grew gradually worse until in certain localities some kinds of labor were almost out of the market. During that period steam skidders came into use in this territory and more and more of them are being put into operation each year. Teamsters became very difficult to get and the good ones apparently disappeared with the rest of the old-time lumberjacks. This and the fact that horses have steadily risen in price has had much to do with the adoption of steam skidders by many operators.

There is no question but what the steam skidder has come to stay. It certainly has a place in the present day logging operations in this territory. Some will say that substituting engineers for teamsters will not better the labor conditions. As a matter of fact I feel certain that those who have tried both teamsters and engineers in their woods operations will testify that the men commonly found to run steam skidders are a much more reliable class of laborers than are teamsters. The relief felt by some operators when free from the teamster led them to operate exclusively with their steam skidders, probably to their loss. Certain localities can be logged cheaper with horses than by steam. Nearly every operation has lands best logged with horses and it is probable that nearly all holdings have certain lands best logged by steam. A combination of both is often possible, the nearby timber taken by teams and the timber further back by the skidders. No two operations are alike, and advice given as to methods of logging are largely worthless unless all the local conditions are known and taken into consideration. What is possible and profitable in one district may be utterly impossible in others. Size, density and quality of timber, labor conditions, soil, snow fall and topography may, any or all of them enter into this difference. Every operation needs special study as a whole, and from year to year, because conditions will change as time passes.

The distance one can profitably skid with a steam skidder is governed by a number of things. Outside of the loss of time in hauling out lines the cost of the wear and tear on cables must be considered. We have seen no operations in this district where we considered skidding more than seven or eight hundred feet from the machine profitable, though with the ordinary skidder logs can be handled from nearly double that distance. In many places the steam outhaul is indispensable; in others, horses do the work as cheaply or cheaper than steam, when everything

is taken into consideration. Theoretically, steam is the best, but it is not always possible to put theory into practice. While the lines go back faster with the steam outhaul, being a continuous line, they are more in the way, and sawyers and swampers must keep out of the way of them. They are less pliable, harder to take to a log not exactly in the trail. This is true in spite of the trailers and chokers used to enable the men to attach logs to the cables. Steam return lines can be abandoned with little labor and horses substituted. It would seem as though it were wiser to have them to meet all conditions. I am unable to make comparisons between ground lines and overhead lines, as my experience is limited to the former. Those skidders that load their logs as skidded are probably cheapest to operate, but it is sometimes advisable to deck logs for future use. For that work the four-line skidder that decks the logs as they are skidded is the best. If an operation is large enough it is advisable to have both types.

Varying with conditions and the growth of timber a four-line skidder with steam return lines or horses will skid and deck from 40,000 to 60,000 lumber scale every ten-hour day, skidding up to 800 feet with steam outhauls and half that for horse return lines. A two-line skidder will average from 30,000 to 40,000 lumber scale. If the timber grew absolutely even and there were no mishaps so that all four lines would finish at each setting at the same time, a four-line skidder would do double that work. These figures are based on timber that will average ten logs to the thousand feet, lumber scale. A lumber scale basis is used here because some operators use a Doyle and some a Scribner rule for scaling logs. There is an element of danger in using steam for skidding not found in horse skidding. A steam skidder is without question a valuable part of any logging outfit, and my personal judgment is that it should be of a type that will propel itself to avoid the necessity of the presence of a locomotive when moving. It is important at times to be able to go to the water supply with the skidder. The steam skidder is in general use, as are locomotives. The combination of all of them makes it possible to operate a woods crew practically the year round.

Steam traction engines for winter work on ice roads have been used successfully in some localities, but they are not nearly as adaptable as logging railroads.

There will be many more improvements in steam skidding machinery in the years to come, and these improvements will help solve the problem of obtaining sufficient good help for our operations in the woods.

This was followed by an able article read by R. B. Goodman, of Goodman, Wis., printed elsewhere in this issue of HARDWOOD RECORD.

Secretary Kellogg, reporting for the advertising committee, showed some samples of new birch books issued entirely through the office of the association without any outside assistance. Another particularly valuable feature is a series of ten samples showing the different ways of finishing birch lumber in order to bring out its best qualities.

The question of supporting the wooden box side of the classification controversy received considerable earnest discussion, and at a meeting of the directors held in the morning it was decided that $500 should be raised by subscriptions among the membership to start this work directly. After a considerable discussion it was moved that the association subscribe by individual subscriptions not less than $1,000.

J. T. Phillips of Green Bay then issued an invitation to members to hold their next meeting at Green Bay in July.

W. C. Landon stated that he considered the traffic department would be of extreme value to the association. He asked Secretary Kellogg to tell of the work of the traffic department of the Wausau Advancement Association. It was finally moved that a special committee be appointed to consider the matter.

The meeting then adjourned to convene again at Green Bay in July.

What Is Poon?

Poon is a word meaning tree in some parts of India and Ceylon. In the early history of the English occupation of India the officers of the navy made themselves acquainted with the descriptions of timbers available and suitable for masts and spars. They selected a tree which was described by Linnaeus and named by him *Calophyllum inophyllum*. The native who had no particular name for this tree referred to it under the general name "poon," which is now the generally accepted trade name of this important wood. It is a magnificent tree producing one of the most important woods in the tropics. It attains a diameter of from one to five feet near the base; its extreme height is one hundred feet, with a stem of sixty feet to the nearest branch. The poon is one of the most beautiful trees and there is perhaps no other tree in the East Indies that is so well known as this one. It is a native of India, Ceylon, Siam, Burma, Borneo, Philippine Islands, and on practically all the islands of the South Sea.

Poon is an evergreen tree often called Alexandrian laurel, and in India flourishes very luxuriantly on poor soils, in fact, where scarcely any other tree will grow. On the South Sea Islands it prefers damp soils and is found from the borders of the sea to the valleys, where it spreads, and often near the streams. The tree blossoms several times a year and the seeds which the tree produces are always in great abundance and invariably germinate and grow up unless damaged by fire or other causes. Poon is planted very extensively in Java in avenues on account of the perfumes of its flowers and the elegance of its foliage. As a result of its great commercial importance the tree is widely cultivated also in India and parts of Africa, and is worthy of high recommendation for planting elsewhere, not only for the wood, but for the resin which it yields and the oil contained in its seeds. The tree is also of great value for shade and ornament. For this purpose it was first introduced into the West Indies and Central America, where it is now thoroughly naturalized and is found escaped in the most remote districts in tropical America. Even in tropical Africa poon has been so extensively planted that it is now a commercially important tree in a good many places.

The true poon of India is closely related to the tropical American species, *Calophyllum calaba*, which is commonly known as the santa maria or palo maria. The wood of the latter is difficult to distinguish from that of poon. Both of these trees are cut and the wood sold as a mahogany substitute. Santa maria comes to the American markets only very seldom through the ports of Pensacola, New Orleans, and Galveston, while the poon comes in occasionally direct from India, or as reshipments from England. Small shipments have been received also from the Philippines, where the tree is now just beginning to be exploited.

The reputation of poon rests on its use for spars and masts, and in parts of India the drain upon this species has been so great for these and other purposes that the trees are now becoming scarce, and in some localities more valuable than teak. The young trees, especially such as are in accessible places, are most carefully preserved. In Ceylon the tree is very highly esteemed and there it is used extensively in boat-building and is employed generally beyond all others for planking of small sailing vessels and for the construction of all kinds of machinery; in fact it is used for all purposes which demand a very hard durable wood. It is in request also for making canoes and is among the best woods in India for charcoal.

The wood of poon is hard, heavy (about forty-two pounds per cubic foot), reddish-brown, tough, compact, somewhat coarse and straight-grained, and exceedingly durable in contact with the soil and water. It is usually a very ornamental wood and is susceptible of a high polish. It is often handsomely veined and resembles mahogany in appearance and working, and is in request by cabinet makers. Beautiful furniture is made from it. When intended to be used in cabinet work, it is important that it should be procured a long time previously, for if it is not very dry the article of furniture is liable to split or warp. Poon does not warp or check to any appreciable extent after thorough seasoning. Differences in these qualities, according to latitude, soil, or situation, are, however, very observable. From what has been said about poon, its value can be readily appreciated. L. L. D.

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 428—Wants Ash and Oak Squares

New York, April 12. Editor HARDWOOD RECORD: At present we take the liberty of asking you a favor. We are exporters of all kinds of handles, and have recently received inquiries, and we would esteem it a favor if you would kindly give us the names and addresses of some reliable firms dealing in lines of that nature. We have been exporting ash hay fork handles to countries where the duty is considerably lower on lumber in rough condition than on ready-made handles, and we are, therefore, now looking for manufacturers who can supply us with square wood blocks cut to length and not thicker than fit for one handle, of such nature that all that is to be done is to turn them down to the proper size. We have also had inquiries for oak squares for parquet floors.

Thanking you beforehand for any information you can give us as to where we can obtain such material, and trusting we may have the pleasure of reciprocating, we remain.

The exporter above quoted has been given a small list of manufacturers of oak and ash squares.—EDITOR.

B 429—Seeks Ash Oars

Glasgow, Scotland, April 4.—Editor HARDWOOD RECORD: We are desirous of obtaining supplies of ash oars, and shall be glad if you can put us into communication with manufacturers of this stock.

The above correspondent has been supplied with the names of a few manufacturers of the stock referred to.—EDITOR.

B 430—Wants to Market Bending Oak

Cincinnati, April 19.—Editor HARDWOOD RECORD: We will soon be manufacturing at our new plant a considerable quantity of bending oak, and would thank you to furnish us with the names of consumers of this variety of stock in thicknesses of from 2 to 4 inches.

Anyone interested in the above source of supply for bending oak is invited to communicate with the Mail Bag section, B 430, care HARDWOOD RECORD.—EDITOR.

B 431—Wants Derrick for Loading Logs

Cincinnati, O., April 19.—Editor HARDWOOD RECORD: We are in want of a good stationary derrick, capable of loading logs into cars under the handling of one or two men. We would like to have a derrick of sufficient strength to carry up to five tons, if necessary, but do pot know whether it is possible to have a derrick geared in such a way that it could load such a weight as that without steam appliances. We suppose, as a matter of fact, that two or three tons would be as heavy as we would require to lift at any time, but we do not want a weakling. Perhaps some of your advertisers would be glad to hear of this. A good second-hand derrick would no doubt suit us quite well. It is wanted for delivery on the Lexington & Eastern railway in Kentucky. We will appreciate any assistance you can give in this matter.

The writer of the above letter has been supplied with the information asked for. Any others interested can have the address upon application.—EDITOR.

B 432—Regarding Air-Drying Beech

Grand Rapids, Mich., April 21.—Editor HARDWOOD RECORD: Can you advise us of the most approved method of air-drying beech lumber? We find that it is prone to crackle-check.

The above inquirer has been referred to Henry Ballou, general manager of Cobbs & Mitchell, Inc., Cadillac, Mich., who is an authority on lumber seasoning. Mr. Ballou's reply is as follows:

"The indications are that this climate is much more favorable for the seasoning of beech lumber in the open air than a more southern climate, or where they are subject to prevailing dry winds. There are times when some of our exposed piles will have quite a bit of this season check on the face, but with the ordinary season and a little precaution in piling, where the piles do not get a wind exposure, we are able to season our beech lumber without many defects. Of course, if the piles are left open in the summer time, for any great length of time, the beech lumber will be nearly ruined, but this we have to guard against and see to it that freshly sawed beech lumber is not exposed to the rays of the sun to exceed one day without protecting it.

"We presume that we would have more difficulty if we sawed this stock in thicker lumber, but as we saw everything into inch boards, we are able to control the matter of season checking in our beech lumber quite successfully.

"If we were seriously annoyed in regard to this season checking, we should take greater precaution in closer piling and perhaps be obliged to stand boards on end on the side of the pile from which the dry wind came, but in doing this, a person would have to use good judgment in not closing the pile to an extent that would mold the lumber. We would be bothered with the two extremes and would have to be cautious to follow the middle ground. I cannot think of any other remedy to overcome trouble of this kind, and trust that this information may be of service to you."

H. BALLOU.

B 433—Wants Kraetzer-Cured Tupelo

Lancaster, O., April 18.—Editor HARDWOOD RECORD: We are in the market for 250,000 feet of 4/4 firsts and seconds bay poplar, 11 to 16 inches wide, Kraetzer-cured and kiln-dried. We can sell a nice block of this lumber if we can secure it.

The above correspondent has been supplied with the names of supply for this wood, and any others interested can have the address on application.—EDITOR.

B 434—Wants Three-Ply Red Gum, White Oak and Ash

Memphis, Tenn., April 16 - Editor HARDWOOD RECORD: Can you give us the names of manufacturers in this territory who produce three-ply built-up stock in red gum, white oak and ash in ¼, 5/16 and ⅜-inch thicknesses? Would also like to have the names of parties in the North who make this stock in birch.

The above inquirer has been supplied with a list of probable sources of supply for the panel stock named. Any others interested can have the address on application.—EDITOR.

B 435—Wants List of Mahogany Log Buyers

New York City, April 17.—Editor HARDWOOD RECORD: Will you please advise me of the names of concerns in Chicago and vicinity that deal in mahogany, that is, firms buying mahogany logs for the purpose of manufacturing them either into lumber or veneers?

Also would like a list of people buying greenheart, cortez, santa maria, black laurel, blue mahoe and lancewood.

The above inquirer has been supplied with a partial list of mahogany log buyers, and of various other imported woods. Others interested can perhaps find a new source of supply for this class of logs by addressing the above writer through B 435, care Mail Bag section, HARDWOOD RECORD.—EDITOR.

B 436—Wants Source of Supply for White Oak Wine Shooks

Owensboro, Ky., April 17.—Editor HARDWOOD RECORD: We would like to have you give us the names of manufacturers that are in position to supply white oak wine shooks for casks of from fifty to fifty-three-gallon capacity; also the heading to go with the shooks. We will appreciate a prompt reply and thank you in advance for this favor.

——— & Co.

The above correspondent has been supplied with the names of several probable sources of supply for white oak wine shooks and heading. Any others interested can have the address on application by referring to B 436.—EDITOR.

B 437—Seeks Northern Growth White Oak.

Minneapolis, Minn., April 14.—Editor HARDWOOD RECORD: Can you give me a source of supply for a carload, at least, of fine straight-grained northern white oak, firsts and seconds quality, in 4/4, 5/4, 6/4 and 8/4 thicknesses?

- FURNITURE COMPANY.

This inquirer has been given a possible source of supply for the lumber he seeks. Any others interested can have the address on application.—EDITOR.

B 438—Wants Dry Chestnut Lumber

Janesville, Wis., April 9.—Editor HARDWOOD RECORD: Can you tell us where we can find some dry chestnut lumber?

The above writer has been supplied with a probable source of supply for chestnut. Any others interested can have the address on application.—EDITOR.

B 439—Wants Sassafras 6x8-12

Columbus, O., April 12.—Editor HARDWOOD RECORD: I am in the market for 1200 pieces of 6x8-12 sassafras, sound and square edge, f. o. b. Columbus, O.

The above inquirer has been supplied with a list of possible sources of supply for the sassafras named. Any others interested can have the address on application.—EDITOR.

B 440—Wants Labor Saving Device

Columbus, O., April 12.—Editor HARDWOOD RECORD: We are looking for helps to more economically take care of our lumber. We have heard of them, but have never been able to locate them or see an advertisement. One is a piling machine which quickly raises a board at a time to top of pile in high piling. Another is a ball-bearing runway that by a simple push will carry a board fully 100 feet each side of a car.

——— COMPANY.

The writer of the above letter has been supplied with the address of the manufacturer of an improved type of lumber hoist, and also has been advised how to construct dead-roll labor runways for handling lumber.—EDITOR.

B 441—Importation Mexican Mahogany

NEW YORK, Apr. 10.—Editor HARDWOOD RECORD: From the fact that the American market is entirely bare of Mexican mahogany, it will be of interest to buyers to know that we expect a large shipment of big square Mexican mahogany logs to arrive by vessel on or about Apr. 15. We also have just received a choice lot of African figured mahogany logs.

SCHUNDLER & DE SOLA.
24 State Street.

B 442—Hamburg Firm Wants Commission Connections

Hamburg, Germany, April 24—Editor HARDWOOD RECORD: We are anxious to secure connections with reputable American hardwood mills on a straight commission basis, not as agents. As you know this company has operated at Hamburg for more than a century. In fact we do the biggest part of the Hamburg lumber business. Buyers do not insist on seeing stock handled by us, but because of our reputation are in many cases willing to accept our description.

News Miscellany

Annual Philadelphia Lumbermen's Exchange

The twenty-seventh annual meeting of the Philadelphia Lumbermen's Exchange was held April 10, William T. Betts in the chair. There was a full attendance of members all in happy accord with the occasion and in a state of elation over the flourishing condition of this association. The election of officers was practically a one voice ceremony. After the appointing by the president of Herbert P. Robinson, judge, and J. W. Turnbull and Joseph P. Comegys, tellers, Charles P. Maule, treasurer, read his annual report, in which the prosperous condition of the exchange was duly emphasized.

John H. Lank, secretary, in the absence of Ralph Souder, chairman of the committee on legislation, then read the committee's annual report. He was followed in rotation by B. Franklin Betts, chairman, committee on railroads and transportation; George A. Howes, chairman, committee on office and entertainment; Joseph P. Comegys, chairman, committee on membership; Eli P. Hallowell, for the auditing committee. Amos Y. Lesher, chairman, credit bureau, read an interesting report on the work done by his committee, which report was ordered to be printed and copies sent to all the retailers in the city.

After the reading of the report of the trustee and relief fund committee, by Daniel Adams, the annual report of President William T. Betts, an interesting feature of the meeting, was in order. In this report Mr. Betts among other important matters called special attention to the great work being done by the credit bureau system, which is carried out by the exchange. He also made the pleasing statement that the exchange membership includes 125 active members, four non-resident and one privileged member, total 133. Mr. Betts expressed his hearty appreciation of the kind help given by the directors, Secretary John H. Lank and the various committees, and wished his coming successors the same good fortune.

Mr. Betts' report was followed by the nominations. Horace A. Reeves, Jr., named Benjamin Stoker of George W. Stoker & Son for president. John E. Lloyd placed William H. Fritz of W. H. Fritz & Co. for vice-president, and William C. MacBride, in happy nomenclature, nominated "the watchdog of the treasury" and many years' faithful treasurer of the exchange, Charles P. Maule, as his own successor; all of which nominations were closed. The nominations for audit committee, composed of Samuel B. Vrooman, chairman, Franklin Smedley and Eli B. Hallowell; and Robert C. Lippincott, as trustee of relief fund, followed, and as there were no competitors, Secretary John H. Lank was directed to cast one ballot electing all these officers. Samuel H. Shearer, Samuel Roberts and Horace A. Reeves, Jr., were elected directors to fill the three vacancies occurring at this time.

Thanks were expressed by the presidents of the various affiliating organizations for the use of the rooms of the exchange; at this meeting also thanks in resolution were passed by the exchange to the various trade papers for copies sent for the exchange files. John H. Lank, the popular secretary, whose election comes before the board of directors, has been slated for re-election. After short speeches from the new officers the meeting adjourned at 4:25 p. m.

The annual banquet was held at 7 p. m. in the dome room on the roof garden of the Bellevue Stratford hotel. This finely appointed banqueting room and the tables were decorated to suit the occasion. Speech making was wisely eliminated and a select vaudeville show presented instead. The well known kindling wood quartette of the exchange, assisted by Harry Saylor, the popular baritone, rendered some choice music during the evening. It is universally conceded that this annual function of 1913 quite eclipsed any other held in previous years by the exchange, the credit for which is due the committee on office and entertainment, composed of George A. Howes, chairman; George Rodgmen, William P. Shearer, Howard Ketcham and Victor E. Kugler. Dainty booklets, enclosing menu and list of officers and members, were donated as souvenirs of the occasion by the Pennsylvania Lumbermen's Mutual Fire Insurance Company, Philadelphia; Lumber Mutual Fire Insurance Company, Boston, Mass.; Lumbermen's Mutual Insurance Company, Mansfield, Ohio; Lumbermen's Mutual Insurance Company, Indianapolis, Ind., and Central Manufacturers' Mutual Insurance Company, Van Wert, Ohio.



BENJAMIN STOKER, PRESIDENT PHILADELPHIA LUMBERMEN'S EXCHANGE.



WM. H. FRITZ, VICE-PRESIDENT PHILADELPHIA LUMBERMEN'S EXCHANGE.



CHARLES P. MAULE, TREASURER PHILADELPHIA LUMBERMEN'S EXCHANGE

Annual Meeting Machinery Manufacturers

On Apr. 14 the American Supply & Machinery Manufacturers' Association, the National Supply & Machinery Dealers' Association and the Southern Supply and Machinery Dealers' Association held a joint convention at Indianapolis. The convention was successful in every way, the attendance particularly being gratifying in view of the flooded condition which made access to Indianapolis particularly difficult. In all there were 774 delegates present.

The three associations met in joint sessions twice, and in addition each organization went into executive session on each day of the convention. These individual sessions were open only to members of the individual organizations.

Among the topics discussed were: "Banking and Currency Reform;" "Resale Prices and Price Maintenance;" "Trade Opportunities in the Balkan States;" "More Efficient Salesmenship," and "Uniform Workingmen's Compensation Laws."

Spring Meeting Michigan Manufacturers

As this issue of HARDWOOD RECORD comes from the press, Apr. 25, the Michigan Hardwood Manufacturers' Association is convening in its regular quarterly meeting at the Pontchartrain hotel, Detroit. The subjects coming up for discussion and on which specific information of value to every member will be presented are: Present market conditions in hardwoods and hemlock; outlook for hemlock bark; employers' liability insurance and compensation; forest fire protective methods; reports of various committees on the question of continued affiliation with the National Lumber Manufacturers' Association. No stock report will be presented, but much information will be available regarding present and future outlook for the marketing of hemlock and hardwood. Deputy State Insurance Commissioner Robert K. Orr of Lansing will address the meeting on Employers' Liability.

Lumbermen's Club to Hold Annual Meeting

The annual meeting of the Lumbermen's Club of Cincinnati will take place on May 6 at the Business Men's Club. A new set of officers will be elected at this meeting and there is much speculation among the lumbermen as to just who the favored ones will be. Two very strong tickets have been nominated and the election is sure to be a hot contest. The men responsible for the selection of candidates to run on the "Regular" ticket are S. W. Richey, Harry R. Browne and Hedley Card. This committee nominated for president, W. E. DeLaney of the Kentucky Lumber Company and also president of the Hardwood Manufacturers' Association of the United States; for first vice-president, J. S. Zoller of the Talbert-Zoller Lumber Company; for second vice-president, H. A. Hollowell of H. A. Hollowell & Company; for treasurer, Emil Thoman of Bennett & Witte, and for secretary, J. A. Bolser of the Blackburn & Bolser Lumber Company.

Those who are responsible for the nomination of the "Independents" are Emil Thoman, J. Watt Graham and Geo. Morgan. This committee nominated for president, C. C. Hagemeyer of the H. L. Mickle Lumber Company and also of the Tennessee Lumber & Coal Company; for first vice-president, Ralph McCracken of the Kentucky Lumber Company; for second vice-president, J. C. Rash of the Shawnee Lumber Company; for treasurer, Geo. Hand of the Bayou Land & Lumber Company, and for secretary, V. B. Kirkpatrick of Fagin & Kirkpatrick.

With the Chicago Club

The board of managers of the Lumbermen's Club of Chicago, feeling that the resident membership limit of four hundred can easily be reached, has just started a membership campaign which is already showing very satisfactory returns. The board decided to eliminate the admission fee for both resident and non-resident memberships up to June 1, 1913. It authorized the president to appoint two committees to be known as the "red" and "blue" committees, for the purpose of recruiting new members. President F. R. Gadd appointed G. H. Holloway as chairman of the Red Committee, and A. H. Ruth as chairman of the Blue Committee. Each of these men has selected ten co-workers, all of whom will endeavor to secure the co-operation of other members of the club. Red and blue application blanks have been printed and are being carried constantly by the committees, who are actively at work buttonholing prospective new members. By striking off the initiation fee, the cost for resident membership up to Sept. 1, 1913, will be $13.35 and for non-resident membership up to Mar. 1, 1914, will be $12.50.

The new administration has inaugurated what is known as club night. This provides that there shall be "something doing" every Saturday night at the club to stimulate active interest and attendance on those nights. The second of the ladies' nights will take place on Saturday evening, Apr. 26. On this occasion card playing, dancing and music will be indulged in. The success with which a similar function was attended several weeks ago more than warrants the prediction that the proposed event will be successful in every feature.

The Alton Lumber Company Purchases Timber in West Virginia

Sixteen hundred acres of hardwood timber were recently purchased by the Alton Lumber Company of Buchanan, W. Va. In addition to this purchase, the band mill at Mill Creek, W. Va., known as the Skull mill, has been bought.

Advertising Clubs to Hold Important Convention

There has been considerable agitation of late with a view of eliminating from advertising copy of all kinds statements which are intended to mislead those reading the advertisements and buying on the strength of them. Such copy has done a great deal to prevent a feeling of complete confidence in the public mind in advertising as a means of merchandising. Probably no other class of men is actuated by more sincere and intelligent motives than the professional advertisers of the country. They are banded together in an association of enormous numerical and intellectual strength and are making every effort to place advertising on such a basis that it will be accepted as an absolutely reliable source of information as to the lines of goods advertised. The advertisers' association, known as the Associated Advertising Clubs, is planning to hold a large convention at Baltimore, Md., in the second week of June. It is expected that there will be fully 10,000 advertising and business men in attendance. At a series of open meetings, covering nearly a week, the great problem of advertising and selling will be discussed by the most successful and progressive business men in America. All the marketing and merchandising problems which manufacturers have to meet will be discussed by men who have met and solved them. Delegates and members from one hundred and thirty-five advertising clubs in every part of the United States and Canada will be present, and it is fully expected that every business interest and every phase of industrial activity will be represented. No matter how little or how much advertising any business man does, this convention unquestionably will be an immense business help, for, as before stated, every line of business and the problems confronting each will be discussed by "men who know."

Chicago Bowlers Hold Banquet

The members of the Lumbermen's Bowling League of Chicago and their guests assembled for their annual banquet in the Lumbermen's Club rooms last Monday night, Apr. 21. In all there were about seventy in attendance, representing members of the eight teams which make up the league. A pleasant dinner was served and the occasion was made more enjoyable by the rendition of a number of songs adapted to the affair. Pleasing talks were given by Douglas Malloch and by F. R. Gadd, president of the Lumbermen's Club.

Memphis Club Favors Federal Levee Control

The Lumbermen's Club of Memphis, at the regular meeting held at the Hotel Gayoso April 12, adopted a strong memorial to Congress asking that the United States government take over the construction and repair of the levee system in the Mississippi valley and that it assume responsibility for flood control throughout this area. It was pointed out that the expense would be very heavy, but that it was comparatively small for so important a power as the federal government to assume. It was further emphasized that the task was so gigantic that nothing short of the federal government could handle it properly. The secretary was ordered to communicate this action to the proper authorities at Washington.

There have been no further developments in the insurance situation here. At a special meeting of the club a few days ago a vote of thanks was extended James E. Stark and the other members of the law and insurance committee for the splendid manner in which they had handled the insurance subject. Mr. Stark said that he and his associates appreciated this expression of thanks very much and declared that they would do everything they could for the best interests of the club. He reported that the delegation from this (Shelby) county to the Tennessee legislature was opposed to the bill which had been introduced providing for the payment of an additional three per cent on, and a fee of one dollar for recording, all policies written with insurance companies not authorized to do business in Tennessee. Mr. Stark also said that the Nashville lumbermen had objected to the bill which had already been introduced into the legislature providing for the creation of a separate forestry department and that no further action would be taken by the Lumbermen's Club until more communication had been had with the lumbermen of Nashville. It would seem that the latter have drawn up a bill which is to be substituted for the other.

H. B. Anderson, president of the Business Men's Club, addressed the Lumbermen's Club. He said that the former felt very highly honored that the latter had allowed it to affiliate therewith. He further said that the feeling of friendliness and good fellowship existing in the Lumbermen's Club was the ideal toward which the Business Men's Club and all of its affiliated organizations were working. He asserted that he had never seen anywhere an organization in which there was such keen competition and still keener friendship than prevailed in the Lumbermen's Club. He also congratulated the lumbermen upon the fact that they looked so very cheerful in the face of the flood damage from the Mississippi and the proposed placing of lumber on the free list by the Democratic party.

O. U. Coppock of the S. P. Coppock & Sons' Lumber Company, Fort Wayne, Ind., was elected to active membership. Mr. Coppock is located at Memphis as the representative of his firm.

There were about sixty members and guests present and the meeting was a most enjoyable one.

Weight Hearing at Washington

The general weighing investigation before the Interstate Commerce Commission was held at Washington, D. C., on Apr. 16. The weight of testimony was unquestionably proof of the fact that the system of track scales, weights and weighing as employed by various railroad systems of the country is seriously inadequate and inefficient. Repre-

sentatives of the roads conceded this point in their testimony, but pleaded for a postponement of action until such time as they could secure reports from the American Railway Association covering improved methods suggested and adopted by the railroads. The shippers contend that such a postponement would not be just.

One of the main points touched upon in the testimony has to do with the weighing of cars in motion as compared with the greater accuracy obtained by weighing cars spotted.

The lumber trade was well represented by association representatives and individuals. John W. McClure of Memphis, Tenn., was the only speaker for the lumbermen, and he suggested that the Interstate Commerce Commission should supervise the installation and operation of track scales and weights. Mr. McClure maintained that the greatest accuracy should be maintained in weighing practices inasmuch as the weights on lumber are just as important in determining quotations as are actual freight rates.

Death of Lloyd Williams

Lloyd Williams, youngest son of the late Ichabod T. Williams, founder of the hardwood firm of I. T. Williams & Sons, New York City, died Apr. 3 at his residence, 312 West Seventy-second street. He was forty-eight years old.

Mr. Williams began his business career in the employ of his father and was later admitted to partnership in the firm and until 1908 was actively identified with the business. In that year he retired from the firm and had traveled extensively. He is survived by a widow, two daughters and one son.

Inspection Statement of National Association

The March inspection statement of the National Hardwood Lumber Association shows a satisfactory increase over March, 1912. The national lumber inspectors inspected a total of 11,463,234 feet in March, 1913, which is an increase of 2,417,851 feet over March of the preceding year. These figures are particularly gratifying to the association officials in view of the unfavorable weather conditions with high water and floods which have prevailed of late in many sections. This volume of work was accomplished at an expense to the association over and above the fees earned of $234.97.

The association has received sixteen new applications for membership since the letter of March 17, which brings the total number of new members admitted during the present fiscal year up to one hundred twenty-six.

The letter contains notices of changes in the addresses of inspectors as follows: C. C. Ferguson, formerly of Louisville, Ky., to Greenwood Place, New Albany, Ind.; Ed. Borgeson, to 1124 Twenty-first avenue North, Minneapolis, Minn.; J. J. Miller, to 34 Howard street, Toronto, Ont.

Regarding the coming annual convention of the association to be held at the Hotel Sherman, Chicago, on June 5 and 6, the letter states that, while a complete program of entertainment will soon be announced, arrangements have already been completed which warrant the statement that both the business and entertainment features will attract the largest attendance in the history of the association. It is suggested that members make hotel reservations early. The regular banquet will take place on Thursday, June 5, and the smoker and buffet lunch on Friday, June 6. Elaborate arrangements are being made for the entertainment of visiting ladies.



THE LATE LLOYD WILLIAMS, NEW YORK, N. Y.

John M. Woods Honored

John M. Woods of John M. Woods & Co., Boston, Mass., and Memphis, Tenn., was honored at the recent election of the Massachusetts department of the G. A. R. In its recent annual encampment in Boston John M. Woods was elected to the post of junior commander. This is the first time that election as an executive officer of the department has been tendered to a member of the Willard C. Kinsley post 139 of Somerville to which Mr. Woods belongs.

Mr. Woods received 359 votes, while his rival candidate received 195. On motion of his defeated rival, Mr. Woods was elected unanimously. Mr. Woods has been a past commander of post 139 and is one of its strongest supporters.

Carl L. White New Chief Inspector Hardwood Manufacturers' Association

The resignation of Lewis Doster, secretary of the Hardwood Manufacturers' Association and in that capacity chief inspector of the association, brings into office Carl L. White as chief inspector. Mr. White has inspected lumber for the Hardwood Manufacturers' Association for a number of years. The new chief inspector comes from Portsmouth, O. He will maintain offices in the association headquarters in the First National Bank building, Cincinnati, but will spend the greater part of his time on the road in direct connection with his inspection work. The new chief is amply qualified by long experience to handle his new office.

A. S. Bliss Lumber Company Discontinued

A. S. Bliss of the A. S. Bliss Lumber Company, hardwood wholesaler of Minneapolis, announces that he has discontinued the business of that company and that he, personally, will become a member of the Minneapolis Lumber Company, a firm of long standing in that city. W. H. Sill of the Minneapolis Lumber Company is retiring from active business and Mr. Bliss is buying in his interest.

Emerson's Efforts Futile

It appears that the strenuous and violent efforts of A. L. Emerson of the Industrial Workers of the World to unionize the woodworkers in the South are futile. In a recent speech in a small Louisiana town, Emerson admitted that he had been practically deserted and that he could not carry on his campaign alone. Thus it seems probable that sawmill operators in that territory will not in the near future, at least, be faced with as serious a condition as has prevailed for some time.

Numerous woods operators who formerly were affiliated with the Emerson organization have applied for reinstatement, but have not in every case been successful.

Switching Decision at Baltimore Still Pending

It develops that the question of switching charges was not, as had been expected, settled by the decision of Judge Duffy in Circuit Court No. 2 on Mar. 26, but that an appeal has been taken, and that the case will be fought out before the Maryland Court of Appeals, the highest tribunal in the state. The Maryland Public Service Commission refused, after Judge Duffy had handed down his decision, upholding the contention of the railroads in so far as intermediate and connecting line switching were concerned, and sustaining the Public Service Commission with respect to the rates fixed for yard and industrial switching, to alter its decision fixing the rates for all kinds of switching, which action will doubtless be followed by Judge Duffy issuing a permanent order to enjoin the rates declared by him to be excessive. The case will then go to the Court of Appeals. The Public Service Commission took up the matter again and gave a hearing because additional evidence had been offered by the railroads before Judge Duffy. The law provides that when new testimony is given upon an appeal from the commission, the court may remand the case to the commission for further consideration. The Public Service Commission, in its order, established rates running from $1 to $6 per car for switching within the city district, which included a small section outside of the municipality. The railroads had been charging regular freight rates where the switching was to be done from one line to another, and in some instances the charge amounted to half as much as the freight rate from Baltimore to Pittsburgh.

Important Deal in North Carolina

J. M. English, Robert Greenwood and T. E. Blalock of Asheville, N. C., recently closed for the purchase from Charles H. Christian of Minneapolis, Minn., of 3,000 acres of virgin hardwood timber situated on the Yellow creek in Graham county, North Carolina. The purchase also involves 2,500,000 feet of dry lumber, a seven-foot band mill, five miles of tram road, and a logging engine and all equipment. It is estimated that the consideration was in the neighborhood of $125,000. The sale is actuated by Mr. Christian's decision to retire from active participation in the lumber business. The dry lumber will be shipped immediately. It is expected that within the next six weeks the mill will be turning out 30,000 or 40,000 feet of hardwood lumber daily. The tract contains hardwood entirely, including oak, poplar, chestnut and other less important species. This tract should produce between 12,000,000 and 15,000,000 feet of lumber.

Central Veneer Company to Make Improvements

The Central Veneer Company of Huntington, W. Va., suffered materially recently from the high waters at that place, but it has already practically recovered from this severe trial. Taking advantage of the opportunity, it is increasing its facilities for manufacturing poplar crossbanding, of which it makes a decided specialty. Work has been about completed and it is planned to start the plant up again within the next few days.

Practical Co-Operation

The New York State College of Forestry has arranged with the agricultural department of the New York Central railroad to secure for experimental and demonstrational purposes the New York Central experimental farm number two. The college has pointed out constantly that the wood lots and idle lands along the New York Central and other lines in the state should go far under proper forest management toward producing the annual need in ties and other timbers. At present the New York Central lines require annually about 3,500,000 ties for use in their tracks in New

York state alone. This means an annual expenditure of over $2,500,000, most of which at present is paid for ties produced in the South. In addition to securing this revenue for residents of the state of New York, the plan would effect the utilization of non-producing land and of trees which otherwise would find no use whatever. It would have a further effect of conserving tree growth now converted into ties which could be profitably used for other purposes.

The demonstration will be begun this month by the planting of about fifteen acres of trees of a number of varieties suited to lowland conditions. Among these will be white ash, tulip, Norway spruce, bald cypress, tamarack and other varieties. By proper planting, a tie can be produced much more quickly than in the native forests. It is anticipated that by producing their own ties, they can fill their needs more cheaply than by buying on the open market.

Important Arkansas Purchase

It is announced from Louisville that R. Chanahan and other interests have closed for the purchase of 25,000 acres of hardwood timber in Jefferson and Lonoke counties, Ark. These interests have arranged to construct a railroad line into their timber connecting with the Cotton Belt. The object of the deal is to manufacture the timber and sell the land for agriculture after it is stripped.

Reorganization Important Memphis Hardwood Company

The Memphis Saw Mill Company of Memphis, Tenn., has just been reorganized with a capital of $100,000 as the Memphis Band Mill Company, with James F. McSweyn as president and manager, George McSweyn, vice-president, and Otis A. Felger, secretary and treasurer. The former institution has had a successful career in lumber manufacture under the able direction of James F. McSweyn, and with the reorganization will surely continue as a very successful business proposition.

The company has a first-class band sawmill at South Memphis, and ample and desirable yard facilities above the range of the Mississippi floods. It will produce approximately 12,000,000 feet of hardwoods and cypress annually, and will specialize in quartered and plain oak, gum and cypress, but also will produce a full line of other Mississippi valley hardwoods.

James F. McSweyn has had a long and honorable history in hardwood production, and is one of the best judges of timber, both north and south, and also has splendid executive ability in the handling of a hardwood manufacturing enterprise.

George McSweyn, his son, has immediate charge of the sawmill operation, and in the Memphis district is regarded as the premier sawyer of that region.

Otis A. Felger has long been allied with both northern and southern hardwood operations, and under the title of the Felger Lumber & Timber Company at Grand Rapids, Mich., conducts a wholesale yard, and also has a jobbing yard at Helena, Ark. Both of these operations will be continued.

The new company takes for its trade-mark an ornamental design in which the word "Quality" prominently figures. This is simply a continuation of the policy of the old company in making not only high-grade lumber, but high-grade lumber of the best possible manufacture and seasoning.

The Memphis Band Mill Company takes over a very desirable stock of southern hardwoods and cypress. It has a million feet of high-grade logs at its mill at the present time, and another million feet ready for loading. It has contracts ahead for enough logs to keep the mill going steadily for a full year, and in addition has a source of timber supply which will keep the plant in operation for many years.

All parties connected with the new enterprise are to be congratulated on the new alliance.

Increased Capacity of Kentucky Lumber Company

The Kentucky Lumber Company, with headquarters at Cincinnati, O., announces that it has recently acquired a considerable tract of hardwood timber at Sulligent, Ala. This town is located about two hundred miles from Birmingham. It is estimated that the stand will provide for about ten years' cut. It runs mainly to gum, with a smaller percentage of other hardwoods. While the timber is somewhat scattered, it is of excellent character. The Kentucky Lumber Company is now erecting a sawmill with 40,000 feet daily capacity and it is anticipated that work on this mill will be completed in the near future.

Statement of Ownership and Management

Agreeable to the act of Congress of Aug. 24, 1912, requiring publishers of periodicals to file with the postmaster general and the postmaster in the office at which such publication is entered, a sworn statement setting forth the names and postoffice addresses of editors and managing editor, publisher, business manager and owner, and in addition the stockholders, if the publication be owned by a corporation, and also the names of known bondholders, mortgagees, or other security holders, and that such sworn statement shall be published in such newspaper or other publication, the following sworn statement is herewith printed:

HARDWOOD RECORD is published twice a month at Chicago, Ill.

The names and postoffice addresses of the editors are as follows:

Henry H. Gibson, editor and business manager, 4649 Woodlawn avenue, Chicago, Ill.

Hu Maxwell, 927 Ashbury avenue, Evanston, Ill., associate editor.

E. W. Meeker, 4758 Magnolia avenue, Chicago, Ill., associate editor.

Publisher: The Hardwod Company, 537 South Dearborn street, Chicago, Ill., the officers of which are Henry H. Gibson, president; E. H. Defebaugh, vice-president; Burdis Anderson, secretary and treasurer.

Stockholders holding one per cent or more of total amount of stock are Henry H. Gibson and E. H. Defebaugh.

There are no known bondholders, mortgagees and other security holders holding any bonds, mortgages or other securities of this company.

(Signed) Henry H. Gibson,
Editor and Business Manager.

Sworn to and subscribed before me this third day of April, 1913.

J. S. Pennington,
Notary Public.

My commission expires October 24, 1916.

New Mill of the Bellgrade Lumber Company, Memphis

The Bellgrade Lumber Company of Memphis, Tenn., is planning a new sawmill which will be located at Isola, Miss. The plant will be of modern construction and modernly equipped throughout. An eight foot band mill with twelve-inch saws will be installed and all features will be thoroughly modern. It is probable that the mill now operated by the Bellgrade company will be given up during the month of August, at which time it is anticipated that the timber from which it gets its logs will be exhausted. The new mill will cut logs from the timber holdings of the Bellgrade company in Mississippi. This timber runs mainly to red gum and oak, and is of high quality.



J. F. McSWEYN, PRESIDENT AND MANAGER MEMPHIS BAND MILL COMPANY, MEMPHIS



GEORGE McSWEYN, VICE-PRESIDENT MEMPHIS BAND MILL COMPANY, MEMPHIS

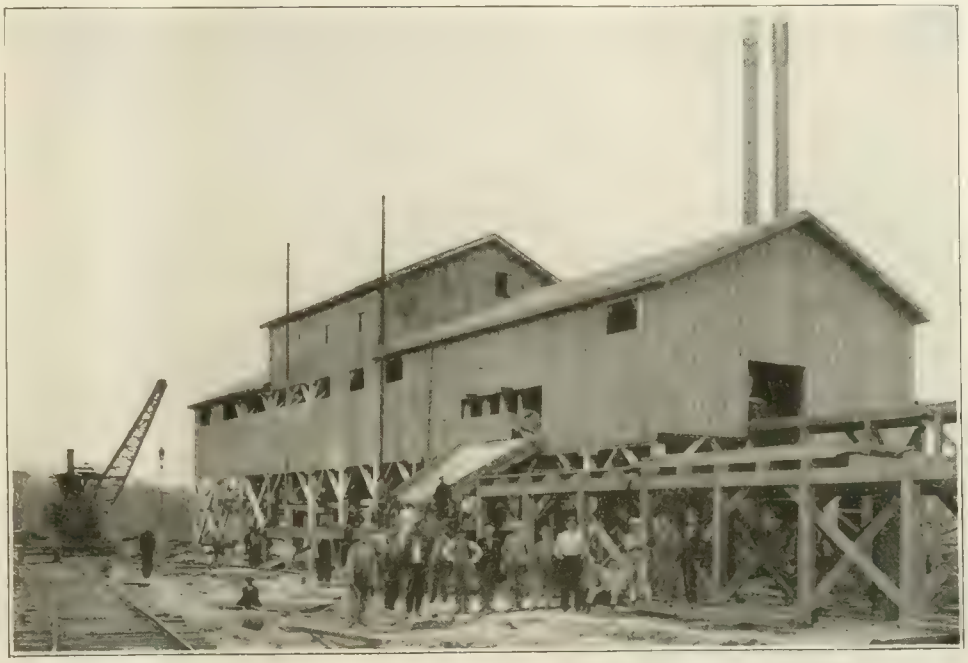


OTIS A. FELGER, SEC'Y-TREAS. MEMPHIS BAND MILL COMPANY, MEMPHIS

New Plant of the Philip A. Ryan Lumber Company

Accompanying this story is a reproduction of a photograph showing the recently completed hardwood sawmill of the Philip A. Ryan Lumber Company, manufacturer and dealer in hardwood lumber and logs, of Onalaska, Tex., and Memphis, Tenn. The mill recently started operations at Onalaska. It is equipped with a Clark band mill with twelve-inch saws and with a McDonough resaw equipped with ten-inch saws. The capacity is 50,000 feet daily. The Philip A. Ryan Lumber Company has secured more than 50,000,000 feet of hardwood, running mainly to oak, ash and gum, in the vicinity of Onalaska.

The Philip A. Ryan Lumber Company is better known in connection with its operations at Memphis, where it has its headquarters. This company was organized at Memphis about two years ago with a capital stock of $50,000. Philip A. Ryan has been president and treasurer since its incorporation and also is holder of the entire stock of the company and active manager of its operations. His original debut in the lumber field was made with Kelly, Maus & Co. of Chicago about twenty years ago. His next affiliation was with the Deering Harvester Company of Chicago. With this company he had entire charge of the yards and spent much of his time in buying and inspecting and contracting for hardwood and yellow pine stocks. Leaving the Deering company, Mr. Ryan went with the McCormick Harvester Company of Chicago, remaining in its employ for about a year, at the end of which time he became affiliated in a partnership known as the Ryan-McParland Lumber Company, of which he was president and general manager. In the course of time this company purchased a mill at Memphis, which it operated for a year, at which time the partnership was dissolved. Mr. Ryan then took the plant and operated under his own name. He subsequently formed a partnership with J. V. Stimson of Huntingburg, Ind., under the style of Ryan-Stimson Lumber Company. He continued in this capacity until the incorporation of his present business. Until the completion of his present mill, Mr. Ryan secured his lumber from a Memphis custom sawmill, which mill sawed the Ryan timber.



NEW MILL OF PHILIP A. RYAN LUMBER COMPANY AT ONALASKA, TEX.

Mr. Ryan's business has prospered exceptionally well since its incorporation and it is confidently predicted that his new move will result entirely profitable to him.

New Secretary Hardwood Manufacturers' Association

Owing to the resignation of Lewis Doster, secretary of the Hardwood Manufacturers' Association, President W. E. DeLaney announces the selection of William H. Weller of the White-Weller Lumber Company of Buffalo, N. Y., as secretary to succeed Mr. Doster. As before announced, Mr. Doster has become general representative of Joshua Oldham & Sons, Inc., saw works of Brooklyn. Mr. Weller will assume his new duties on May 1, at which time Mr. Doster will retire from association work to enter upon his new line of endeavor.

Mr. Weller brings with him into his new berth a varied and valuable experience in the lumber trade, which gives him an excellent foundation for successful service with the association. He was born in Indiana, Feb. 8, 1870, and began his career with the Terre Haute Car & Manufacturing Company, which afterwards became an allied institution of the American Car & Foundry Company. He served as an employe of this concern in a minor capacity at first and from time to time advanced until he became auditor and general purchasing agent, having charge of the lumber purchases. After spending eleven years with this concern, in 1901 he went with the St. Louis plant of the American Car & Foundry Company, where he had charge of the hardwood department and in addition managed the three sawmills of the company at Huntington, W. Va., Jeffersonville, Ind., and White Plains, Ky.

In 1905 Mr. Weller went to Seattle, where he became secretary and treasurer of the West Coast Timber Company operating mills in Whatcom county, Washington. In 1907 he returned to his native city of Terre



PHILIP A. RYAN, PRESIDENT AND TREASURER PHILIP A. RYAN LUMBER COMPANY, MEMPHIS



W. B. ROBINSON, SECRETARY AND BOOKKEEPER PHILIP A. RYAN LUMBER COMPANY, MEMPHIS



WM. H. WELLER, CINCINNATI, NEW SECRETARY HARDWOOD MANUFACTURERS' ASSOCIATION OF THE UNITED STATES

Haute, where he spent two years in the concrete construction business. In January 1910 he re-entered the lumber business, having been appointed sales manager of the Tug River Lumber Company, Huntington, W. Va., where he remained until August 1910, when he went to Buffalo to become assistant to the president and general manager of the Buffalo Copper & Brass Rolling Mills. He remained in this position until October 1912, when he formed the White-Weller Lumber Company at Buffalo, handling west coast lumber and hardwoods from the East.

Mr. Weller will now retire from this partnership to take up the duties of secretary of the Hardwood Manufacturers' Association. Mr. Weller is married, has two children, and will remove his family to Cincinnati to take up his permanent abode there.

Prominent Cincinnatian Dead

One of the old members of the Cincinnati trade, Thomas W. Keeveny of the T. W. Keeveny Lumber Company died at his home on Apr. 10. This company's business is located on West Eighth street.

The deceased is survived by his sons, Eugene D. Keeveny and Joseph T. Keeveny. The former is in the lumber business in New York City, while the latter has been associated with his father in Cincinnati. Four daughters also survive. The family will continue the business.

Williams Brothers Company Will Dismantle Mill

The Williams Brothers Company of Cadillac, Mich., announces that the camp at Elton, Mich., will shortly be dismantled. This company still has over 200,000 feet of timber in the woods, but operations will be discontinued during the summer and this stock will be left for next winter. The company will devote its time and energy to the construction of camps in Colfax and Albar, Mich. These camps are for the purpose of cutting timber from the tract recently purchased from A. F. Anderson, who is moving from Cadillac.

Three New Yards for Cincinnati

Three lumber concerns not now maintaining yards in Cincinnati will shortly complete arrangements for yard space in the St. Bernard section of that city. These three companies are the Kelsey Hardwood Lumber Company of North Tonawanda, N. Y., The Hugh McLean Lumber Company of Buffalo, N. Y., and the Cherry Lumber Company of Elkins, W. Va.

Arrangements have been completed, and the Norfolk & Western Railroad, from which the yards will run switches, has completed its survey for the installation of the switches for the three companies.

These three newcomers in the Cincinnati trade will be close neighbors. The Hugh McLean Lumber Company will occupy about five acres of land on Carthage Pike, immediately south of the Snook-Veith Lumber Company, which site is that of the old K. & P. Lumber Company which went out of business two years ago. The Cherry Lumber Company has been dickering for some time for a site in Cincinnati. This yard will front on Murray road in St. Bernard, and will extend over 700 feet along the Norfolk & Western tracks, which ground will cover two acres and will be adjacent to that of the Francke Lumber Company.

Directly south of the Cherry Lumber Company property is that of the Kelsey Hardwood Lumber Company. This company's new property will also cover two acres. It will have an agreement regarding switching with the Cherry Lumber Company.

Varner Land & Lumber Company Purchases Arkansas Timber

A deal was closed last week in Pine Bluff whereby the Varner Land & Lumber Company bought a very valuable tract of timberland at Humphrey, known as the Sondheimer tract. The consideration named is $300,000. The deal was made by R. Carnahan, a capitalist of Louisville, Ky. The Varner Land & Lumber Company now owns and operates a large hardwood mill near Geridge, in Lonoke county, Ark., and propose to take immediate steps toward locating a big hardwood plant on this newly acquired property. The new plant being erected will rank among the best hardwood mills in the South. The officers of the Varner Land & Lumber Company are Wm. Coulson, president; G. W. Allport, vice-president and general manager; W. E. Parmelee, secretary, and J. S. McDonald, treasurer.

This sale was made with the approval of the directors who were placed in the firm to look after the interests of the creditors thereof. The consummation of this transaction has made it possible for the E. Sondheimer Company to pay all of its indebtedness, including both principal and interest, and means that the affairs of the firm will revert to the original owners thereof. The cash which was received from the land was distributed among the general creditors, while the deferred notes were pledged with the banks to which the firm owed money. Since the trouble which the firm had some months ago the affairs of the company have been managed by three members of the firm and directors representing the creditors. The liquidation of the outstanding indebtedness means that the directors representing the creditors will be eliminated and that the management will revert to the original stockholders. Rudolph Sondheimer is in Chicago now arranging the preliminary details.

New Plant Kansas City Hardwood Flooring Company

The Kansas City Hardwood Flooring Company of Kansas City, Kans., last week purchased from the Southern Trust Company of Little Rock, Ark., an eight-acre tract of land lying in the southeastern part of Little Rock, upon which the company will erect its new plant. The consideration paid for said tract is $14,000. Following the recent loss by fire of the company's plant in Kansas City, E. L. Bruce, president, turned his attention to southern cities in quest of a new site for the plant. Little Rock was finally selected, the Chamber of Commerce being instrumental in effecting the deal.

The company proposes to build buildings which will cost in the neighborhood of $100,000, the plans for which are now being drawn by Little Rock architects. The construction of the new plant will be rushed, and the officers of the concern promise to have the plant in operation within the next ninety days. The company will employ one hundred men, at least sixty five of whom will be expert mechanics.

Wisconsin Lumber Company Loses Deering Plant

At noon on Apr. 17 the Deering plant of the Wisconsin Lumber Company of Chicago, located at Deering, Mo., was totally destroyed by fire. Owing to the high water the plant had been shut down for several days and repairs were in progress. About twenty minutes after the fire was discovered the plant was a complete wreck. It was a band mill with Filer & Stowell machinery, having a capacity of 70,000 feet a day. The officials of the company got busy immediately with plans to rebuild, and work is already in progress for clearing away the wreckage preparatory to the erection of a new mill on the same site.

The new structure will be considerably larger than the old building, inasmuch as the old structure originally was designed for circular mill and at the last moment was changed to a band mill. The equipment of the new mill will be similar to that of the old one consisting of Filer & Stowell band mill and resaw. The loss was completely covered by insurance.

Bird's-Eye Veneer Company About Ready for Operation

The Birds-Eye Veneer Company, a newly organized concern at Escanaba, Mich., announces that about the first of May it will begin active operations at its new plant at that point. The company was organized for manufacturing birds-eye maple veneer, plain birch and maple cross-banding and backing, its specialty, as indicated by its style, being birds-eye maple. The company's plant is one of the most complete rotary cutting veneer plants in the country. It is of fireproof construction throughout.

The Birds-Eye Veneer Company has a large supply of birds-eye maple logs, which will tax the full capacity of the plant until the first of September. It also has a good connection with timber holders which will insure it a continual supply of not only maple logs, but of birch, basswood, ash, elm, and other domestic woods. It is also planned to manufacture and deal in Circassian walnut, mahogany and foreign woods. The company already has booked several orders and has many applications for stock at the present time.

Hardwood News Notes

MISCELLANEOUS

The Claremont Wood Working Company has been incorporated at New York City.

The Paris Lumber & Manufacturing Company has discontinued business at Paris, Texas.

The Tennessee-Alabama Lumber Company at Mt. Pleasant, Tenn., has gone out of business.

The Brownlee Company has been organized at River Rouge, Mich., with a capital stock of $250,000.

The Vollmar & Below Company has been succeeded by the Below Lumber Company, Marshfield, Wis.

An increase in capital stock to $160,000 has been made by the Durham Buggy Company, Durham, N. C.

J. E. Lawrence has been appointed receiver for the Lexington Veneer & Lumber Company, Lexington, O.

The Horne-Spark Veneer Company has been succeeded by the J. T. Horne Company, Tuscaloosa, Ala.

The Archibald Wheel Company, Lawrence, Mass., has incorporated under the same style, the capital being $800,000.

The Royal Glenn Land & Lumber Company with a capital stock of $100,000 has been incorporated at Petersburg, W. Va.

The Western Cabinet & Fixture Company, Kansas City, Mo., has greatly increased its capital, viz., from $20,000 to $150,000.

The Germain Manufacturing Company has been incorporated at Saginaw, Mich., with a capitalization of $75,000, and will manufacture piano parts.

The McKenzie Wood Working Company is the style of a new organization which has been incorporated in New York City with a capital stock of $10,000.

Owing to the increasing business of the L. Jensen Company, saw and planing mill operators at Ewen, Mich., its capital has been raised from $400,000 to $650,000.

The Youngstown Pattern Company of Youngstown, O., has been incorporated with a capital stock of $20,000. The new company will manufacture wooden patterns.

The Pioneer Pole & Shaft Company of Memphis, Tenn., and Piqua, O., will shortly erect a circular saw mill at Camden, Ark., for the manufacture of pole and shaft squares.

The Seavers Piano Action Company, Inc., has started business at Buffalo, N. Y. The capital stock of this company is $500,000, and the incorporators all are Buffalo men.

The W. H. White Company, Boyne City, Mich., is planning the installation of a new shingle mill at that point. This mill will take the place of one destroyed by fire a year ago.

The F. H. Haskell Lumber Company has succeeded Frank H. Haskell at Lynn, Mass., and incorporated with a capital of $25,000, by F. H. Haskell, H. A. Haskell and C. E. Haskell.

The Michigan Hearse & Automobile Company of Grand Rapids, Mich., is planning to make a two-story addition to its factory at that point, and also increased its capital stock from $30,000 to $50,000.

The Sturtevant-Larrabee Company, manufacturer of auto truck bodies, located at Binghamton, N. Y., is preparing to add to the line limousines and other pleasure car bodies as well as bodies for taxicabs.

The Washington, N. C. Buggy Company of Washington, N. C., is planning to double the capacity of its plant at that point. The new building will be 435 feet long by 100 feet wide, and three stories high.

George F. Robertson, manufacturer of sash, doors and wood automobile parts, has merged his business into a stock company at Romeo, Mich., under the style of the George F. Robertson Company, with an authorized capital stock of $13,500.

The Becker Cabinet Company situated in the Bronx, New York City, recently took out articles of incorporation with the secretary of state of New York. The company will manufacture and sell musical instruments. Its capital stock is $5,000.

CHICAGO

T. J. Christian of Maley & Wertz, Evansville, Ind., was in the city on business, Apr. 23.

Rudolph Sondheimer of the E. Sondheimer Company, Memphis, Tenn., has been in the city several days making final arrangements relative to the big timber sale which this company recently made.

This office is in receipt of a copy of a telephone card issued by the Owen M. Bruner Company, Philadelphia. It contains space for the notation of Philadelphia telephone numbers.

Nichols & Schuppert have commenced business in the wholesale and retail hardwood lumber field, and are located at 2420 S. Loomis street, Chicago.

Earl L. Cook, J. R. Newport and Samuel W. Newman have formed the Newport Lumber Company with a capital of $100,000, to manufacture timber products at Chicago, Ill.

The Belmont Mill Company is the style of a recently incorporated concern at Chicago, which has a capital stock of $20,000.

The Fritts Company is the name of a new concern in the local trade. This company will manufacture special furniture and interior finish. It is located at 2020 W. Kinzie street, and has an authorized capital stock of $10,000.

H. P. Keith of the Keith & Hiles Lumber Company, Crandon, Wis., was in town on Apr. 18.

F. D. Timlin, manager of the Wisconsin office of the Wheeler-Timlin Lumber Company, situated at Wausau, Wis., spent several days recently in conference with Mr. Wheeler, who handles the Chicago end of the business.

Harold Smith, buyer for the Racine Manufacturing Company, Racine, Wis., was in the city on Apr. 22.

Walter N. Kelley of Walter N. Kelley Company, Detroit, Mich., well-known in northern hardwood lumber circles, was in town on Apr. 12, together with M. L. Martin of the Embury-Martin Lumber Company.

E. B. Ford, sales manager for C. C. Mengel & Brother Company, Louisville, Ky., spent several days of last week on business in Chicago.

A. W. Seeley of Phillips & Seeley, Saginaw, Mich., prominent hardwood wholesaler, spent Apr. 18 with the local trade.

W. W. Dings of the Garetson-Greason Lumber Company, St. Louis, Mo., was one of the distinguished vitistors to the local trade recently.

Charles A. Phelps of the Hackley-Phelps-Bonnell Company, Grand Rapids, Mich., passed through Chicago on his way to Madison, Wis.

J. S. Weidman of Mount Pleasant, Mich., spent a day recently with the local trade.

W. T. Culver, vice-president and general manager of the Stearns Salt & Lumber Company, Ludington, Mich., was one of the prominent visitors with the local trade the last week.

Charles H. Bradley of C. H. Bradley & Co., Duluth, Minn., spent Apr. 10 with the local trade.

N. F. Rittenhouse of the Rittenhouse & Embree Company, Chicago, has just returned from a week's visit to Canadian mill points.

J. H. Faust of J. H. Faust & Co., Paducah, Ky., spent part of last week with the local trade on a selling trip.

The semi-annual edition of the "Blue Book" published by the National Lumber Manufacturers' Credit Corporation of St. Louis, Mo., dated April, 1913, has just been received.

HARDWOOD RECORD acknowledges receipt of a very handy table showing parcels post rates, gotten out by the Linderman Machine Company, Muskegon, Mich. The table is printed on metal and shows the rates on parcels of different weights between zones.

J. F. McSweyn and Otis A. Felger of the recently organized Memphis Band Mill Company, Memphis, Tenn., spent a few days in town on business in connection with their new organization. Mr. McSweyn and Mr. Felger favored HARDWOOD RECORD with a call on Apr. 22.

The April issue of McIlvain's Lumber News issued by J. Gibson McIlvain & Co., Philadelphia, Pa., has been received at this office.

NEW YORK

Robert W. Higbie, hardwood manufacturer of New York, was elected president of the Chamber of Commerce of Queens last week. Mr. Higbie is interested in several financial and commercial enterprises of Queens county, where he makes his residence and is an active worker for the betterment of the commercial life of the county.

The Weber Piano Company has leased property in Long Island City where it will establish a factory building. The plant will include dry kilns, boiler house, varnishing room and every other department represented in a finished piano. Lumber storage sheds will be built to care for the large stock of hardwoods the company consumes. The Aeolian Company owns the Weber Piano Company.

Edward De Groot, representing the Standard Dry Kiln Company of Indianapolis, was a visitor to New York during the fortnight.

A change in the local hardwood trade took place last week when it was announced that J. C. Burgess and Edgar Furgess had resigned from the Maley, Thompson & Moffett Company and would engage in the wholesale hardwood lumber and veneer business on their own account under the style of Burgess Brothers. The new company has leased yard premises in the Erie Basin section of Brooklyn. The Messrs. Burgess have been with the Maley, Thompson & Moffett Company of Cincinnati, and Moffett, Robbins & Company, Havana, Cuba, for many years and are well expetienced in the business and known to the trade.

W. A. Monroe, for many years in the New York office of the Maley, Thompson & Moffett Company, has been appointed manager of that office to succeed Edgar Burgess, resigned. The office at 65 Beaver street will be continued as well as the yard at Erie Basin, Brooklyn. There will be no change in the conduct of the business in this city. Mr. Monroe is well qualified for the position to which he has been advanced.

Charles H. Barnaby of Greencastle, Ind., president of the National Hardwood Lumber Association, was a New York visitor last week.

PHILADELPHIA

James H. Campbell of Currie & Campbell says business is satisfactorily responsive and the outlook continues favorable. Ben C. Currie has just returned from their mill in Jacksonville, N. C., which is in charge of William N. Lawton. He reports the plant working full capacity turning out roofers, flooring, etc.

Daniel B. Curll is on a visit to his mills in Tennessee looking up the stock situation, etc. The natural inference from reports emanating from the Philadelphia office is that business as usual is in excellent shape. Prices in all lines are firm.

The Forest Lumber Company has moved to Nos. 825 and 826 Stock Exchange building, where it has better facilities for handling increasing business. A. J. Levy, manager, says the March business was the biggest in the history of the house, and that April so far bids fair to repeat the record. F. X. Diebold, president, is at the company's mill in Konarock, Va., looking after affairs there.

The wholesale and retail lumber business of the Henry C. Patterson Company has been taken over by the Whiting Lumber Company, which after May 1 will move from No. 2029 Land Title building to the new offices and yards at Glenwood avenue and Dauphin street, where it will conduct the business of both companies under the name of the Whiting Lumber Company. It has recently erected an office building on the premises. E. P. Haubert, assistant treasurer, testifies to a positive expansion in trading, especially in the hardwood market, with stronger prices.

Charles K. Parry of Charles K. Parry & Co. says the plant of the Carolina Spruce Company, Pensacola, N. C., is now in fine working order and a lot of excellent stock is being turned out. There is no dearth of business and prices are stiffening. Indications point to good business for the summer.

Charles G. Blake, manager of the Babcock Lumber Company, reports the company very busy; orders are exceeding the supply at this time and prices are firm. O. H. Babcock stopped in Philadelphia recently on his way to the various eastern offices.

J. W. Turnbull of the J. W. Turnbull Lumber Company reports a swelling business, with prices well sustained. The company's schooner, the Lotta A. Russell, with a cargo of about 300,000 feet of Tennessee lumber from Charleston, S. C., went down some forty-five miles off of Cape Hatteras on Apr. 13. The crew was saved by a tramp steamer, and the lumber was insured but the vessel is a total loss.

J. N. Holloway of the Imperial Lumber Company says that as far as selling lumber is concerned business is all right, but the getting of stock is a different problem.

The Meyers-Kress Lumber Company, Wind Gap, Pa., was chartered under Pennsylvania laws Apr. 5. Capital, $15,000.

BUFFALO

The building records for March were unusually satisfactory, showing as they did that Buffalo held the palm among the big cities of the country in the extent of its increased showing of costs. The outlook is for a busy season this spring. Many large projects are under consideration.

The Emporium Lumber Company's main office will be at Utica, N. Y., after May 1, and the quarters there will be very commodious as well as convenient to the Adirondack operations.

The McLean Lumber Company's Memphis mill sustained no damage by the floods, but is running more actively this month than last, and will turn out about 1,500,000 feet of hardwoods.

W. P. Miller of Miller, Sturm & Miller, has returned from a business trip east and reports some successful business. The yard is handling a good quantity of plain oak.

I. N. Stewart & Bro. say there is more cherry moving at present than for some time, although trade in it is not heavy. The poplar demand is holding up satisfactorily.

T. Sullivan & Co. report the hardwood trade as very fair this month, the sales being largely in ash, elm and basswood. F. M. Sullivan has been spending some time looking after trade in the East.

The Standard Hardwood Lumber Company has experienced considerable difficulty in getting its large shipments of oak and chestnut forwarded from the South, owing to floods, but stocks are now coming in better.

PITTSBURGH

C. E. Breitwieser & Co. are getting a splendid trade with the Ohio yards and find that hardwoods figure pretty largely in this business. A. G. Breitwieser of this concern announces that trade has been very satisfactory throughout the season.

Adelman Lumber Company is coming right to the front in the hardwood line and has been booking some excellent business of late. President A. Adelman was over in Ohio during the flood week but by good luck managed to keep ahead of the high water.

W. P. Craig, president of the W. P. Craig Lumber Company, surprised his friends Apr. 18 by taking a life partner—Miss Isabella Adams McGill of Wilkinsburg, Pa. After an extended eastern wedding trip the couple will make their home at Mr. Craig's summer home at Ingomar on the Butler trolley line.

The E. H. Shreiner Lumber Company has recently contracted for some more nice stocks of West Virginia lumber. Mr. Shreiner is pushing matters hard this year and looks for a big total of sales for 1913.

The B. W. Cross Lumber Company reports buying quite satisfactory and the situation in general O. K. Mr. Cross spent a few days in the Cincinnati district lately.

The Foster Lumber Company has just bought another nice tract of oak and hardwood timber in Harrison county, Ohio, which will cut about 600,000 feet of lumber.

The newly organized Manufacturers Lumber Company has moved its headquarters from the Park building to the Business Men's Exchange on Diamond street, where it is very nicely located.

W. A. Richter, who was formerly with Garling & Splane of this city, has opened offices for himself in the Business Men's Exchange on Diamond street. He will represent the Williams & McKeithen Lumber Company of Lynchburg, Va., in this territory and will have oak for a specialty.

The Aberdeen Lumber Company has been getting ahead large shipments of gum and cottonwood. President Woollett took some big orders for these stocks a few weeks ago and is well pleased with this business to date.

J. M. Hastings, president of the J. M. Hastings Lumber Company, was in the city a few days last week. He has spent much of his time the past few months in Nova Scotia overseeing the big operations of the Davison Lumber Company, of which he is also president.

The Germain Company reports some increase in its export trade and says that the coastwise trade is picking up right along. Locally the company does not see much gain.

The Western Lumber Company is having a splendid trade in factory lumber and general manufacturing stock. President W. W. Wilson, Jr., announces that March was the biggest month in the company's history.

The Allegheny Lumber Company has raised its capital to $50,000. President Dunn reports business in fine shape all along the line and especially in factory and manufacturing lumber.

The Nicola Lumber Company is well satisfied with sales and prospects so far this year. Yard trade is picking up rapidly and they report a nice lot of orders from the railroads and the manufacturing plants.

BOSTON

William E. Litchfield, a prominent hardwood dealer in this city, has recently returned from a trip to the mill of Litchfield Brothers at North Vernon, Ind. Mr. Litchfield was accompanied by his son, George A. Litchfield. Mr. Litchfield states that the flood did no serious damage to the mill and the company is able to make shipments. A good supply of logs is on hand.

F. R. Babcock of the Babcock Lumber Company, Pittsburgh, Pa., has been calling on the trade in this section.

The Knott-Sampson Lumber Company, Boston, has removed its offices from 88 Broad street to 165 Milk street.

William Bacon of the Davenport, Peters Company, Boston, has returned from a pleasure trip to Panama.

The Specialty Lumber Company, Hartford, Conn., has been incorporated with a capital stock of $25,000. The incorporators are Charles D. Maloney, Frank S. Sellow and John L. Jencks.

Arthur F. Nay, who has been the Boston representative for the J. R. Booth Lumber Company for several years, has resigned to establish a wholesale lumber business for himself.

BALTIMORE

Everett R. Meredith, vice-president of the Farinholt-Meredith Lumber Company, Annapolis, Md., was so severely injured on Apr. 16 in a collision between his motorcycle and an automobile driven by a Baltimorean that one of his legs had to be amputated above the knee. Mr. Meredith was riding along West street, when, in trying to pass another vehicle, he swerved to one side directly in front of the automobile going in the opposite direction. He was thrown over the radiator and fender of the auto into the car, his machine being demolished. An examination at the hospital showed that he had sustained a compound fracture of a leg, broken a bone in one of his hands, and had been cut and bruised about the head and body. The injured leg was afterward amputated.

Charles F. Shaffer, president of the C. F. Shaffer Lumber Company, has been very ill at his home in Laurel, Md., for about a week. It is not thought that he can survive. He is nearly seventy-five years old.

United States Senator John Walter Smith has reintroduced in the upper house of Congress his bill to create a forest reserve and national park in Maryland by taking in all of the timberlands between Baltimore and Washington and between the Baltimore & Ohio and the Philadelphia, Baltimore & Washington railroads. It is estimated that a large part of this territory possesses little value as arable land and that it is admirably adapted to the purposes mentioned in the bill. For the present only an appropriation to make a survey and the appointment of a commission to direct the work is asked. The bill was introduced in the last Congress but failed, and Senator Smith, who is a lumberman himself, believes he will have better success in a Congress controlled by its party.

M. S. Baer of Richard P. Baer & Co., hardwood manufacturers and wholesalers, with offices in the tower of the Maryland Casualty building, is in high spirits these days and has a jovial touch in his manner which can be noticed even above his ordinary good humor and cordiality. The reason therefor is to be found in the fact that he is a father, the first arrival being a son, who weighed eight and a half pounds at birth and gives every evidence of becoming a hustling and wide-awake man. The infant has been christened Richard Price Baer, the name being thus perpetuated in the family.

COLUMBUS

Spring building is assuming large proportions in Columbus and also in the cities and towns in central Ohio. Architects and contractors as well as lumbermen generally are looking forward for an active season and preparations have been made for a good year in every way. While residence construction promises to be the feature of building, it will not be confined to that department, but there will be quite a number of factories, business blocks and apartments erected. The disastrous flood which destroyed several hundred of houses and damaged a lot more on the west side will be the means of stimulating building in this section to a large degree.

The Anthony C. Elswick Lumber Company of Cincinnati has been incorporated with a capital stock of $25,000 to deal in lumber and timberlands. The incorporators are Anthony C. Elswick, H. F. McGee, M. M. Steinhilber, Jesse M. Simon and Archie Borland.

Two bills were passed by the Ohio legislature just previous to final adjournment which seek to bring about the reforestation of the state. One of the bills provides for the exemption from taxation of forest lands under certain conditions. One-eighth of any farm, providing the eighth does not exceed twenty acres, is exempted if it has 170 trees or more to the acre. The other bill provides for planting trees on the 170,000 acres of waste land in Ohio. The recent disastrous floods emphasized the need for these laws.

The report of the city building inspector for the first quarter of 1913 shows that there were 457 permits issued, having a valuation of $741,000 as compared with 419 permits and a valuation of $769,000 for the corresponding period in 1912.

R. W. Horton, sales manager for the central division of the W. M. Ritter Lumber Company, reports a strong demand for hardwoods with prices ruling firm. He says the movement is well distributed among the various grades and thus there is no accumulation of stock. Both factories and retailers are good buyers.

John R. Gobey of John R. Gobey & Co. reports a good demand for hardwoods, with prices well maintained. He expects the demand to increase from this time on.

A. C. Davis of the A. C. Davis Lumber Company says there is a good demand for hardwoods despite the recent floods. Prices are firm and inclined to advance.

Cones & Menefee, West Broad street, who sustained a damage of more than $15,000 from the flood, have established a temporary office at the old location and are retailing lumber. Business will probably be continued at the old stand.

C. G. McLaughlin of the Imperial Lumber Company reports a fairly

good demand for hardwoods although some trouble is seen in the slow shipments of railroads. He says prices are ruling strong.

Manager Maul of the Appalachia Lumber Company reports a good volume of business in hardwoods with trade becoming better as the season advances.

The Nelson Lumber & Manufacturing Company, which operates a plant on Dublin avenue, sustained some damage from the recent flood but not as much as was first thought. Most of the damage was done to hardwood flooring stored at the plant.

Secretary Benbow of the Sowers-Leach Lumber Company says trade is good with his concern and hardwood quotations are ruling firm in every way.

A. T. Wilson of the Kirby Lumber Company of Houston, Tex., has been assigned to Ohio with headquarters in Columbus, and will cover the state for that concern.

Miss Sarah Jones, daughter of Mr. and Mrs. Louis Jones of Columbus, was married recently to Harry W. Fagin, senior member of the lumber firm of Fagin & Kirkpatrick of Cincinnati. The firm will soon open a Detroit office with Mr. Fagin in charge.

CINCINNATI

S. W. Richey of Richey, Halsted & Quick recently stated that the firm's business is steadily on the increase. The difficulty is not in selling stock so much as in finding suitable supplies in quantities sufficient to meet the demand. He believes that 1913 will be a banner year in hardwoods.

Ralph McCracken, sales manager of the Kentucky Lumber Company, is of the opinion that the present heavy demand will increase as the season advances, and that the hardwood trade is getting on a firmer basis than for many years past. Present high prices are likely to continue and grow stronger as the demand increases.

Roy Thompson of the Thompson Hardwood Lumber Company states that the business of his company is very much on the increase, especially in the northwest territory. The eastern business is also all that can be desired. Prospects are bright for a continuation.

W. E. Heyser of the W. E. Heyser Lumber Company says that his company is better supplied with stock to meet the heavy demand of its extensive northwest trade than it has been since it has been in business. Early heavy purchases are now available and they will have a fine lot of hardwoods right along.

W. E. Bennett of Bennett & Witte says that Lumbermen certainly have nothing to worry about with business going along at the present rate. He says while it is true hardwoods are not as plentiful as formerly, his company has been able to supply the demand without much trouble and he thinks that the increased production will be of much help to many dealers who are not now supplied with stock. He states that general conditions are very satisfactory.

Thomas W. Keeveny of the T. W. Keeveny Lumber Company died at his home on Walnut Hills, this city, Apr. 17 after an illness of several months. He is survived by Eugene D. Keeveny who is in the lumber business in New York City; Jos. T. Keeveny, who was associated in the business with his father here, and four daughters. The T. W. Keeveny Lumber Company did a wholesale and retail business in hardwoods which will be continued as formerly by the family.

The Howard & Barber Lumber Company, 309 Provident Bank building, Cincinnati, exporter of domestic hardwoods and pine, announces that Alfred Howard is no longer connected with the company, his interests having been bought out by Edward Barber, who will now have sole charge and management of the business.

INDIANAPOLIS

The Dynes Lumber Company has changed its name to the Indianapolis Lumber Company.

Elmer W. Stout has filed his final report in federal court as receiver for the Ford & Johnson Company, of Michigan City and Chicago.

The George W. Davis Carriage Company of Richmond has changed its name to the George W. Davis Motor Car Company.

J. E. Kuntz, T. E. Kuntz and R. M. Kuntz have organized the South Bend Dowel Works at South Bend to conduct a general woodworking business. The company has been incorporated with an authorized capitalization of $50,000.

The Parry Manufacturing Company, Capitol Veneer Company and Standard Dry Kiln Company, whose plants were in the path of the recent flood, have fully recovered and have resumed operations as usual.

The Cabinet Makers' Union, furniture manufacturers, which recently suffered a $10,000 loss by fire, is rapidly repairing its plant and will soon have its plant restored to a normal condition.

Nelson A. Gladding, vice-president of E. C. Atkins & Co., and retiring president of the American Supply and Machinery Manufacturers' Association, was presented with a silver loving cup at the convention of the association held here Apr. 10, 11 and 12.

Hardwood manufacturers and dealers of this vicinity are anticipating a freight car shortage because of the recent flood. For about two weeks very little freight was able to move on account of the fact that many railroad tracks and bridges were washed out. The fact that electric interurban railway lines suffered much loss also caused considerable additional traffic to be thrown to the steam railway lines. Transportation facilities are now about normal throughout the state, but there is much delay in shipping in some localities, owing to a congestion of freight and inability to get sufficient cars promptly.

MEMPHIS

The movement of logs to Memphis is comparatively small at the moment and will probably continue so for a while. The Valley Log Loading Company is loading logs on the Yazoo & Mississippi Valley line of the Illinois Central and these are being brought to Memphis either over that line or over the line of the Illinois Central. There is practically nothing doing, however, on the Memphis-Marianna cut-off of the St. Louis, Iron Mountain & Southern. The Valley Log Loading Company loads on that line also, but there is so much overflow water that the latter has been put out of commission. The Iron Mountain, however, is preparing to begin repair work on this line just as soon as the water recedes and there is a great deal of timber thereon which has been made ready for loading. The valley Log Loading Company, therefore, expects to resume loading on that road at the earliest possible moment.

The Bentonville Cooperage Company, Bentonville, Ark., has been reorganized. The capital stock is $20,000. C. G. Hopkins, who has been owner and operator of the plant heretofore, has become vice-president and general manager under the new regime. W. C. Bernhardt is president and F. O. Wyman is secretary and treasurer. The company will make a specialty of the manufacture of whiskey barrels.

The Columbia Cooperage Company is preparing to establish a $50,000 plant at McGehee, Ark. It is to be one of the largest and most up-to-date establishments of its kind in southeastern Arkansas. The company already has a considerable amount of raw material on hand and will accumulate more, so that an ample stock will be available when it is ready to begin operations. Construction is to start at once.

Building operations in Memphis promise to be quite full in the near future. Definite announcement is made of the fact that the Rock Island System will begin the construction of the bridge across the Mississippi river here, as well as upon the terminals which are to be constructed in this city. These two undertakings will involve an expenditure of between $5,000,000 and $7,500,000. The Illinois Central is ready to begin the construction of its new union passenger station, which will cost between two and three million dollars. The Commercial Trust and Savings Bank has accepted the plans for its new twenty-two-story office structure to be located at the corner of Union avenue and Main street. Work is also in progress on the new Chisca hotel, which involves a very heavy outlay. There has also been a resumption of work on the building of the Bank of Commerce and Trust Company, which is to be a duplicate of the present Memphis Trust Company building. Numerous other building projects are under way or about to be launched, and altogether the situation is regarded as quite encouraging. Handlers of building material soy that they are anticipating a good business, but just now they are handicapped by the fact that the overflow in the Mississippi has put an almost complete stop to improvement and construction work in the Mississippi valley.

The Mississippi river at Memphis continues to fall very slowly, the water at present standing slightly above forty-one feet. Practically none of the plants which were forced to close down as a result of the flood conditions have been able to resume operations. It is expected, however, that the river will fall more rapidly in the immediate future and that it will be within its banks within the next few days. Some of the mills which have been out of commission in both north and south Memphis for the past two or three weeks will be able to operate within the next day or two, but it will probably be two weeks before all of them are in operation again.

The situation is virtually unchanged at points outside of Memphis. The greater portion of the St. Francis basin is covered with water and all of the mills which were out of commission when the last issue of the HARDWOOD RECORD came from the press are still unable to operate. In fact, owing to additional breaks in the levee system, the number has been increased. The crest of the rise is now below Helena, Ark., and it is reported that there has been a break in the levee about fifty miles below Greenville, on the Mississippi side. Breaks on the Arkansas side include two at Wilson, one at Grave's Bayou, and one at Laconia Circle. The levee at Beulah continues to hold and the engineers believe that they will be able to control the situation at that point. This means that there are a number of plants on the Mississippi side which have escaped interference from the high water.

It will be sometime before the mills in the flooded area in the St. Francis basin will be able to resume operations. This will depend, of course, upon the length of time it requires for the waters to disappear. Practically none of the firms having plants in this inundated area, however, count upon being able to start their machinery again under ten days to three weeks.

J. F. McSweyn has been elected president of the Memphis Band Mill Company, successor to the Memphis Saw Mill Company, of which he was manager for some years. The other officers are George McSweyn, vice-president, and Otis A. Felger, Grand Rapids, Mich., secretary and treasurer. The new company is capitalized at $100,000 and will make a specialty of quartersawed oak and other high-grade lumber.

The Valley Lumber Company has been organized at Camden, Ark., and has taken over the plant of the American Manufacturing Company. It

will engage in the general lumber business and will also manufacture sash and doors. W. W. Brown is president, J. F. Sifford is vice-president and G. W. Niehaus is secretary and treasurer.

The J. O. Nessen Lumber Company, organized under the laws of Illinois, has prepared to do business in Arkansas. It has complied with the laws of that state and E. Butler, Madison, Ark., is named as agent for service.

J. D. Allen of I. M. Darnell Sons' Company is one of the candidates for vice-president of the Business Men's Club. The election will be held next Saturday and it is expected that Mr. Allen will receive the active support of the entire lumber fraternity which has a large membership in the organization.

NASHVILLE

The building permits for March showed that Nashville continues in the lead compared with the same month a year ago, the increase being 148 per cent. The figures were: March, 1913, $186,654; March, 1912, $75,163. The real estate transfers for the past month also showed an increase over 1912.

The Lynnville Lumber Company of Lynnville, Tenn., recently lost its sawmill by fire of unknown origin, a high wind adding to the fury of the flames. A planing mill and much lumber on the same property was saved.

The spoke and handle factory of the N. C. Blanchard Company at Spring City was destroyed by a fire of unknown origin, the loss totaling $8,000, with $1,200 insurance.

The main factory of the Rauther-Scanlon Handle Factory, which concern has a number of plants, will be located here, where ample terminal facilities are to be had. W. C. Kelley, Thomas Scanlon and R. L. Rauther are at the head of the enterprise.

J. W. Alford & Co., Love, Boyd & Co., and Hales & Son have filed an involuntary bankruptcy petition against the Standard Box & Manufacturing Company of this city. The insolvency of the defendant company is claimed and an act of bankruptcy alleged on their part in December last when a general assignment was made.

John B. Ransom, Jr., of this city, son of the late John B. Ransom, for years a prominent member of the local lumber trade and prominent in all public movements, has arranged to place a memorial in the Y. M. C. A. building here in honor of his father who was a leading director in that organization. The fitting up of the directors' room will be effected for the purpose indicated.

Herman Sherer of Louisville, Ky., is arranging for a site to establish a large veneer plant here. A large force of men will be employed and the product will be used for furniture and interior finish. The plant will cost from $15,000 to $20,000.

Several carloads of lumber changed hands at the last meeting of the Nashville Lumbermen's Club. The transportation committee reported work on a comparison of log rates into Nashville compared with other cities similarly situated. The opinion was expressed that Nashville rates are higher than others.

President C. M. Morford of the Nashville Lumbermen's Club has appointed his standing committees for the coming year with the following chairmen: Transportation, A. B. Ransom; Credit and Claims, Hamilton Love; Resolutions, J. H. Baird; Market conditions, T. R. LeSueur; Membership, C. E. Hunt; Entertainment, T. B. Johnson.

ST. LOUIS

Orville Alfred Pier has been selected as the secretary of the Retail Lumber Dealers' Association and of the Lumbermen's Culb to take the place of John B. Kessler, who has held the secretaryship of the former organization for the past ten years and of the latter for about five years, or ever since the club has been in existence. Mr. Pier has been a practical railroad man until a short time ago, and is well posted in organization work.

R. U. Fletcher, local manager of the Hooton Hardwood Lumber Company, reports a splendid business since the company started in this city. Nearly every item is being called for, especially cypress and poplar. Most of the upper grades of cypress are going to the northern markets, while the lower grades are being taken by the local market.

The Garetson-Greason Lumber Company states it is getting more orders than it can handle, because it has very little stock on hand. The three mills of the company are running only part of the time because of high water. Mr. W. W. Dings paid a visit to Chicago a short time ago and disposed of a lot of their stock.

The C. F. Liebke Hardwood Mill & Lumber Company is also doing a fine business. One of the mills has been compelled to close down on account of high water but the other is running all right.

The Lumbermen's Club will hold its April meeting on Apr. 30 at the Washington hotel. Mr. Julius Seidel, chairman of the Entertainment committee promises the members an "Irish Night" and predicts that the members will enjoy themselves quite as well as they did the "German night" of the March meeting.

BRISTOL

The Stone-Huling Lumber Company is preparing to begin operation of the J. A. Wilkinson plant. New machinery is being installed and the large plant is being brought up-to-date. The Stone-Huling Company's present plant will be continued.

Special Examiner J. Edgar Smith of the Interstate Commerce Commission conducted a hearing here last week in the case of the Bristol Door & Lumber Company against the Southern and the Virginia & Southwestern railways, involving freight rates. The same company had a suit against the Carolina, Clinchfield & Ohio railroad but counsel for the latter appeared before the examiner and admitted the allegations of the complaint and asked to make reparation.

The Carolina Spruce Company has begun the operation of its large new mill in western North Carolina. The company has a large area of hardwood timber and will do business on a large scale.

J. Gibson McIlvain of J. Gibson McIlvain & Co., Philadelphia, was a recent visitor on the Bristol market. His company is now doing an extensive business in this territory.

LOUISVILLE

The Norman Lumber Company has announced that it will install a Kraetzer preparator at its mill at Holly Ridge, La. The contract for the equipment was placed recently by E. B. Norman, vice-president of the company, following an exhaustive inquiry into the merits of curing lumber by steam pressure. Mr. Norman is enthusiastic over the prospects for the use of the Kraetzer system.

The Wood-Mosaic Company of New Albany, Ind., of which Will McLean is president, recently secured a splendid tract of timber in Metcalfe county. The purchase was made through Lawrence Brothers, of Tompkinsville. The logs will probably be sawed at the Highland Park, Ky., mill of the company.

Reforms in state taxation were urged at the annual meeting of the Kentucky Manufacturers' Association, which was held in Louisville last week. A number of lumbermen and hardwood consumers attended the convention, which brought together many leaders in the industrial life of the state. Better traffic conditions were also demanded, the president of the state organization declaring that Kentucky is discriminated against in the matter of freight rates.

Traffic conditions caused by the flood are improving only slowly, though locally the railroads have about put things in normal condition. What with congestions at points where floods made it impossible to handle business for several weeks, as well as the great amount of work necessitated by replacements on washed-out divisions, however, the carriers are finding it next to impossible to relieve themselves of the burden placed upon them by the inactivity during the flood season. Some railroad men take the ground that it will be six months before the transportation companies are back on their feet, as far as physical conditions are concerned. A noteworthy feature is that a slight car shortage is developing on account of the tie-up of many cars in the congested sections, resulting in inability to supply the normal quota of cars at other points nearby.

Robert Carnahan, well-known in the timber business in this section, has transferred his attention to Arkansas, having purchased 25,000 acres of timberland in Jefferson and Lonoke counties in that state. The property is to be developed in the immediate future, arrangements for financing the operation having been made with eastern interests. It will be necessary to build a railway to connect the property with the main line of the Cotton Belt, after which a large mill will be located.

Attention has been called to the passing of Valley View, on the Kentucky river, as a hardwood manufacturing center, in line with the general review of conditions along that stream printed some time ago in HARDWOOD RECORD. The last big mill located there was that of the Kentucky River Poplar Company, and it has been sold to the Estill Lumber & Timber Company. The latter is to transfer the mill to Morehead, Miss., where it recently acquired a tract of timber.

An important line of railroad is to be built into Jackson county, Ky., by the Rockcastle River Railroad Company, which is to construct a 30-mile line from East Bernstadt, on the Louisville & Nashville, to McKee, the county seat of Jackson. The Ritter interests of Huntington, W. Va., are now developing property in that section.

Flood conditions have been gradually eliminated in Louisville, and practically all of the plants affected are now operating as before. Loss of time was an even greater factor than damage to lumber stocks, although this was greater than in January on account of the large deposits of mud. Cincinnati, O., lumbermen who recently were in Louisville asserted that never had the river done so much damage as during the March flood, the openings in the piles being filled with mud. Municipal officials are still discussing the question of improving the Point, where the lumber yards hurt by high water are located, and as engineering advice is being sought and federal co-operation has been promised, it looks as if there is an excellent opportunity for something of real value to be accomplished in this direction.

MILWAUKEE

Creosoted blocks are to be used for paving the principal thoroughfares of Milwaukee, that material having been chosen by the department of public works for paving Grand avenue, West Water, Wells and Third streets. This type of pavement is something quite new in Milwaukee, as very few streets have been paved with this material. However, where it has been used it has stood up well under the traffic and will now replace the asphalt on the named streets. About 22,670 square yards of

this pavement will be required, besides that to be used in other parts of the city. L. W. Schruth, a Dakota general contractor, has been awarded the contract on a bid of $95,000. This also includes raising the street to its proper grade, the marshy ground having caused the street and abutting buildings to sink from six to eighteen inches. If this wood pavement will stand up under the enormous amount of downtown traffic it is safe to say that it will replace considerable asphalt and brick pavement in other sections of Milwaukee.

About four hundred hardwood and hemlock logs which the John Week Lumber Company brought to Stevens Point by rail during the winter and banked on the ice above its sawmill, passed under the boom when the ice in the pond went out recently. They are all of good size and many were recovered at various points on the Wisconsin river, but about a hundred went over the dam at Grand Rapids and but few of these will ever be recovered.

The Fond du Lac Church Furniture Company has received an order for over $3,000 worth of church furniture which will go more than half way around the world to reach its destination. It will be installed in a new church at Cape Town, South Africa. This is only one of the many orders the company has filled for cities in various sections of the globe.

The Sheboygan Couch Company, at Sheboygan, is about to erect a large addition to its plant. Contracts are being awarded for the construction of a four-story frame addition, measuring 60 by 150 feet. It is to be erected to the plant on North Fifteenth street.

The large new sawmill of the Kneeland-McLurg Lumber Company at Phillips is now in operation. This mill is the only one Phillips has had since the old Davis mill burned in 1909, and citizens gave the company much encouragement to re-establish the business in their city.

The Brunet Falls Manufacturing Company has decided to establish a box factory at Cornell. The plant will be large enough to employ from fifty to one hundred hands.

The old Upham sawmill at Marshfield is to be repaired and new machinery installed, after which it will again be operated. The work is under the supervision of G. M. Harder.

Washburn lumber companies are already at work putting their mills in shape for the season's run. The Sprague Lumber Company has a crew engaged repairing the mill and putting it into shape to take care of a large amount of logs. The Stearns Lumber Company also has a crew at work on its mill. Both mills have good supplies of logs on hand and also ready for shipment as soon as work starts.

The Mohr-Stotzer Lumber Company, which has been operating a big sawmill at Holt, has decided to erect a modern up-to-date mill at Wausau. The mill will have a capacity of about 60,000 feet in ten hours' run, according to C. F. Mohr of Portage, president of the company. The company recently purchased 50,000,000 feet of timber in Price county from the Fenwood Lumber Company, which will be brought to the mill by rail. It consists mostly of hardwood and hemlock. John S. Griffiths, in charge of the Holt plant, will take the active management of the new Wausau mill.

Phillip Goerres, who founded the Phillip Goerres Cooperage Company in Milwaukee thirty-five years ago, has passed away at his home, 2314 Cold Spring avenue, at the age of sixty-four years. Mr. Goerres was one of the leaders in the business and commercial world of Milwaukee and helped in building up the city as a commercial center of the Middle West. He retired from active business about five years ago, and left the management of the company to Harry E. Friend, president, and Fred W. Ladwig, his son-in-law, who is secretary and treasurer of the corporation. The plant is located at 3210-3224 Fond du Lac avenue. Mr. Goerres is survived by four daughters—Mrs. Fred L. Donies, Washington, D. C.; Mrs. William J. Reuter, Mrs. Fred W. Ladwig and Mrs. A. Rollman of Milwaukee.

The will of Mrs. Margaret Schroeder, widow of John Schroeder, founder of the John Schroeder Lumber Company of Milwaukee, has been filed for probate. The estate, consisting of $100,000 in real estate and $5,000 in personal property, is left in the hands of her sons, Henry J., William A. and Frederick J., as executors and trustees, to be held for twenty years. At the end of that time the property will be divided between her daughters, Ernestine and Frida Schroeder, Mrs. Louise Kieckhefer, Mrs. Emma Borges and Mrs. Rosa Patitz. The sons received their share of the estate before the will was drawn and no provision for them is made in the will.

George F. Luehring, secretary of the M. Hilty Lumber Company of Milwaukee, has been re-elected as school director. Mr. Luehring has been connected with the lumber company for twelve years, and was first elected to the school board to fill a vacancy in March, 1912.

On account of a delay in shipment of some machinery the opening of the Peshtigo Lumber Company's new sawmill at Peshtigo was delayed for several days. It will have a capacity of 125,000 feet of logs daily, and cost $150,000. Superintendent Woodward is in charge.

The Midland Lumber Company of Minneapolis has acquired the property of the F. C. and C. A. Stanley Company of Chippewa Falls. The purchase included the mill, lumber yard and foundry, and the yard will be run in connection with the North Star yard, recently purchased. The mill, which was started thirty-five years ago by C. A. Stanley, has been idle since the founder's death about four years ago, and the resuming of operations will mean much to the city.

The St. Croix Timber Company is at work recovering about 50,000,000 feet of rears which had been left along banks and jammed on the center islands in the St. Croix river during the many seasons of logging in that section. For a score or more of years the annual output was from 250,000,000 to 300,000,000 feet, which were floated to the Stillwater boom. Of late years the decay and washout of dams, which had been maintained for holding a head of water to supply it to the St. Croix as the log drives were in need of it, made it necessary to depend on rainfall, which would at best create a driving stage for only a few days and large rears were deposited. The high water this month has made it possible to float the rears, and the timber company has a large crew of drivers working from the mouth of the Clam river down to the Nevers dam. This is the last drive of logs on that famous logging stream, the logging industry being a thing of the past on the St. Croix waters. The only standing timber now on the river is at the headwaters near Bear Lake, to which a logging railroad has been built to convey the logs to market or mill.

Miss Helen Connor, daughter of Mr. and Mrs. W. D. Connor of Marshfield, was married Apr. 16 to the Rev. Malvin Laird, pastor of the Presbyterian church at Lincoln, Ill. The bride's father is a well-known lumberman of Marshfield.

Glenn Wood Priestley of the W. E. Priestley Lumber Company and Miss Florence Gardner, both of Milwaukee, were married here on Apr. 9. Mr. and Mrs. Priestley will be at home after June 1 at 629 Jefferson street.

The Stevens-Whiteside forestry bill which has been introduced in the Wisconsin legislature has brought about considerable argument to the plan which, by terms of the bill, will halt further forest land purchases until a forest reserve commission can investigate and report on the agricultural value of the proposed purchases. As the report would not be made before two years, no further purchases could be made until then. The arguments for and against the bill are being based on the agricultural value of the lands. If the land is good for agriculture the farmers, timber and land men argue that it should not be tied up by the state. State Forester E. M. Griffith and others in favor are holding that the land is not good for agricultural purposes, that the reserves are necessary to keep a regular and uniform flow from the headwaters for waterpower purposes on rivers and prevent floods.

CADILLAC

Joseph Murphy of Murphy & Diggins and Henry Curtis, superintendent of the Mitchell Brothers Company, Jennings, Mich., have returned from a two weeks' trip to Hot Springs, Ark.

Most of our logs have developed the finest mottle and stripe.

All are producing clear wide flitches and lumber.

Hence the veneer runs above the average in width.

Our band saw, slicer and dryer are now running regularly

Giving us mahogany lumber and veneer to fill any order.

A particularly beautiful figure for discerning piano trade shows in a number of the logs cut.

Nothing better was ever produced.

Your inspection is invited.

Fred W. Black Lumber Company
Chicago, Ill.

Take Douglas Park L to 40th Ave. and walk one block South

W. L. Saunders, president and general manager of the Cummer-Diggins Company, has returned from a month's trip to Panama, Costa Rica, etc.

W. C. Hull of the Smith & Hull Company and Oval Wood Dish Company, Traverse City, Mich., is expected home soon from a six weeks' trip to Panama, Costa Rica and Mexico.

Navigation on Lake Michigan has opened and boats are being loaded with lumber for the lake ports.

The Loud interests of Au Sable have purchased the holdings of the Sterling Cedar & Lumber Company at Charles, Mackinac county, and will operate the mill at that point. They have sufficient timber to keep the mill in operation for several years.

The new dock at Petoskey has been completed and is ready for the season of navigation. The ice has left Little Traverse Bay, so the boats may land at Harbor Springs.

The R. G. Peters Salt & Lumber Company, Manistee, through its receiver, the Michigan Trust Company, has purchased 1,000 acres of land in Wexford county, estimated to contain 12,000,000 feet of hardwoods, in order to fill out its season's cut, which will be the last for that company.

The Mitchell Brothers Company's chemical plant at Jennings has been closed for several weeks to make extensive repairs.

Kentucky Lumber Company
MANUFACTURERS
POPLAR, PLAIN AND QUARTERED OAK, RED AND SAP GUM, ASH, CHESTNUT, BASSWOOD, HEMLOCK, WHITE PINE
Mills at
Burnside, Ky. Williamsburg, Ky.
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Hardwood Manufacturers and Jobbers

Richey, Halsted & Quick
HIGH GRADE SOUTHERN LUMBER

E. C. BRADLEY LUMBER CO.
HIGH GRADE WEST VIRGINA HARDWOODS
GOERKE BUILDING

Johns, Mowbray, Nelson Company
OAK, ASH, POPLAR & CHESTNUT
GUM AND COTTONWOOD

C. CRANE & CO.
MANUFACTURERS HARDWOOD LUMBER
1739 EASTERN AVENUE

CONASAUGA LUMBER CO.
MANUFACTURERS HARDWOOD AND PINE
FOURTH NATIONAL BANK BUILDING

KILN DRIED OAK
AND OTHER HARDWOODS
are one of our many "specialties" which are so satisfactory to others. Why not you?
Might pay you to get in touch with us. It has others
THE M. B. FARRIN LUMBER CO.

DETROIT

The Thomas Forman Company reports that the flooring trade has opened for the year and is now in full bloom. Owing to the number of buildings started last fall and the number of building permits taken out during the winter, the Forman company anticipated a big rush in the flooring trade early in the spring and during the winter prepared for it. It is in a position to supply the trade without a moment's delay, and while it is receiving orders in great quantities each day for hardwood flooring, it is not keeping anyone waiting to be supplied.

George I. McClure reports that business in all lines of hardwoods is very satisfactory and that the prices are still very high, with no prospect of a reduction for some time to come. "I have sold 250,000 feet of dry ash this last week and I haven't a foot left," said Mr. McClure. "While I have several cars on the way to our yards from the South, I do not know when to expect them and cannot receive orders calling for immediate delivery. I think the railroads are doing their utmost to patch up the damage caused by the floods and expect that within a week or ten days we will be well supplied, but as this is a mere supposition on my part I cannot promise my customers anything definite."

In another week or so Mr. McClure expects that the boats will bring down some large cargoes of mixed stock which will benefit the hardwood lumber market materially. The new dry shed which has been under construction for the past two weeks in Mr. McClure's yards is completed and this will enable him to get new dry lumber on the market in large quantities at an early date.

The Brownlee-Kelly Company reports that business is very brisk with no change in price of any kind of hardwood. Its yards are completely cleared of all grades of one-inch birch, one- and two-inch maple and all low grades of hardwoods. However, by this time next week the company expects to have at least two boat loads of mixed hardwoods in its yards in Detroit. It has a goodly supply of orders on its books for all kinds of hardwoods, and especially for crating lumber.

F. T. Sullivan, manager of H. H. Salmon & Co., of Buffalo, was a visitor in Detroit this week.

W. D. Magovern of New York city was in Detroit this week in the interests of his company.

John Lodge, secretary of the Dwight Lumber Company, reports the hardwood flooring trade in a booming condition. Orders and inquiries are coming in in very satisfactory volume and the company looks for an extremely busy spring. Rough stock has been rather scarce, but it is hoped that relief for this condition will be obtained when navigation opens up.

S. L. Eastman of the S. L. Eastman Flooring Company has returned from New York and reports that the floor business is good, prices having increased. Mr. Eastman is a heavy stockholder in the S. A. Robinson Lumber Co., which operates a band sawmill at Goodar, Ogemaw county. The company is building six lines of railroad to reach more timber with which to stock the mill.

A. J. Borkman will soon commence sawing logs at his mill on the Gladstone road near Escanaba and when the logs on hand are used up will move his mill elsewhere. Mr. Borkman is negotiating for a tract of hardwood timber and if successful will have work for several years.

The Hardwood Market

CHICAGO

Conditions in Chicago at present are about on a parity with the condition of trade in most of the large distributing points of the country. A slightly noticeable slowness has been manifested locally for a week or two, but in no case is there reported a recession of values nor will the local trade admit that there is any fundamental reason why it should take less for its stock than it has been getting. It unquestionably is justified in this belief, as business with almost all of the local consuming factors is brisk and where buyers are showing any hesitancy about placing large orders this hesitancy is not because they cannot use the stock, but because they still believe that with the influx of dry nothern wood the market will break. It appears, however, an indisputable fact that the present demand which cannot now be filled will more than take care of any surplus coming from the North during the next month.

Building of all kinds is opening up actively all over the city. It is generally conceded that the office building district of Chicago is over supplied with office space. This fact should result favorably to the lumber trade as investors in building operations will unquestionably turn their attention to the erection of speculative flat building and dwelling houses of various kinds. This line of construction consumes a vastly greater amount of hardwoods than do the modern office buildings, and it is to be hoped that the inclination toward investments of these kinds

during the next few years will continue. If the local consuming trade is adopting a waiting policy, the local distributors of hardwods are following the same course and as far as any evidence obtainable is concerned other than the large amount of stock rushed in from the flooded southern states, there is no reason why they should not be easily able to maintain present market values of all hardwood products.

NEW YORK

As a general proposition, the whole list of hardwoods is ruling at high prices so high, in fact, that buyers are not in the market for great quantities of stock. The wholesale end shows the best demand, the retail buyers not being so active as was expected. There has been no advance in prices and it is said that further advances would make prices prohibitive.

Oak and ash lead in demand, having been in steady call for a long time and high in price. While the market is not so active as dealers expected it would be at this time, the volume has been fair and more activity is looked for as the season progresses.

BUFFALO

A steady amount of business is being done in hardwoods, but the demand is not generally called as active as it was last month. Some attribute this to the high prices prevailing nowadays, but it is usually spoken of as a natural condition at this season. The local market is well stocked and new lumber is being received right along. This month will see a good deal brought in by lake, several of the yards anticipating early receipts. Prices are holding firm and most woods are getting a fair inquiry.

Plain oak has the lead, as usual, with prices strong. Quartered oak is in fair demand, except the common, which is a little slow. Birch and maple are firm and mill culls in the latter wood are in good demand. A big demand exists for thick hickory, which is bringing higher prices. Ash is not at all plentiful and the sales are good where stock is to be had. Poplar keeps firm and is in pretty good demand. Some sales of cherry are reported and dealers in gum are having a fair trade this month.

PHILADELPHIA

The East is particularly fortunate in its exemption from the disastrous visitations of wind and flood in the middlewestern and southern territory during March, but, as was predicted in previous report, the effect of these disturbances is being felt to a considerable extent in the hardwood field here. It is found that not only have the logging and manufacturing ends of the lumber districts in the flooded area been damaged, but the consuming industries as well have suffered severe losses, the result of which can only be a strengthening of values all along the line.

The wholesaler is making a desperate fight for desirable stock, but often without success. The consuming industries in the East keep fairly active, with encouraging signs as to outlook. Buying during March was somewhat spotty, but the market so far in April has strengthened, with values in standard woods moving upward. From the present state of affairs it may be assumed that the hardwood market will hold its present position for some months to come.

Plain oak continues the topliner, with prices climbing; quartered oak remains second on the list; ash, birch and basswood keep good reputation; sound wormy chestnut is still improving; wide stock poplar is waking up; mahogany and veneer is healthy.

PITTSBURGH

Lumber matters here have been moving along very satisfactorily the past two weeks with the exception of the terrible floods which nearly wiped out some retail customers and caused fearful damage to manufacturing concerns and railroads. There is, however, an aftermath of orders coming as a result of these floods which helps in some measure to alleviate the trouble. Railroads the past two weeks have been heavy buyers of white oak timbers for trestles and bridge work. Ties and poles have also been rushed to the flood districts in good quantities and at good prices. Hardwood for construction and repair work is in splendid demand on account of the high water and will be a still larger seller, it is believed, as the concerns damaged begin to fairly realize what they will need to replace their plants, their lines, or their retail stock. In this business oak is bound to be a big leader in demand. Those wholesalers who cater chiefly to the factory hardwood trade report the situation in splendid shape. Factories which bought heavily early in the winter are now beginning to place their order and are freely contracting ahead for several months indicating their confidence in the business situation this year. Hardwood mills are busy throughout this section and hardwood prices are very firm.

BOSTON

There has been a fairly active demand for hardwood lumber during the past two weeks and prices have shown additional strength in many cases. From sections of the country where the floods did considerable damage the reports are that offerings are small and that it is very difficult to make shipments. Letters to Boston dealers indicate that in some sections the manufacturers of hardwood lumber have stopped cutting timber and have been spending their time in removing their logs to points of safety. From such sections it is difficult to find mills that can make prompt shipments. The enforced curtailment in production is making itself felt in the offerings, with the demand in this market increasing and the unfavorable reports from many of the mills relative to supply, the outlook is not very promising for anything but firm prices for the next few months at least. Stocks of hardwood lumber at nearby points are no larger and retail dealers in Boston are not overburdened with supplies. Some of the large consuming manufacturers have fair stock but all buyers are making some inquiries. Quartered oak is very firm with a good demand. Plain oak is exceptionally firm. The call is good and offerings of good stock are small. Maple has been in fair call. While birch and elm have been attracting a fair amount of new business.

BALTIMORE

A feeling has developed of late among the hardwood men here that the crest of the tide in the hardwood trade has been turned, and that, while

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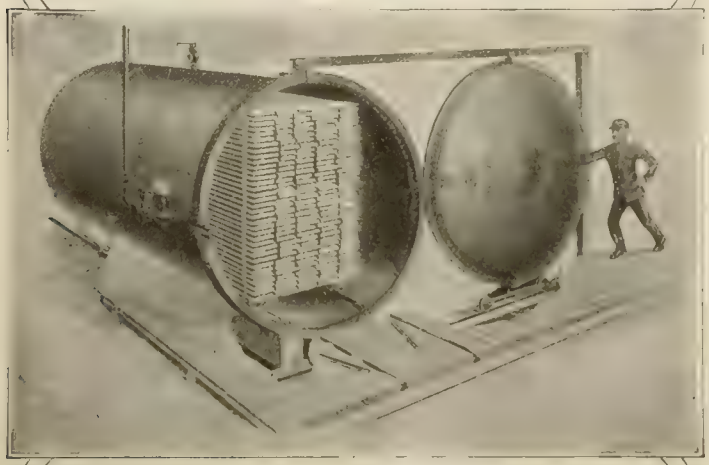
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there is not likely to be any easing off in the range of prices for a time, if at all, the edge has been taken off the demand and it is less easy now to find pick-up orders. Members of the trade state that on their recent trips they found many of the yards to have large stocks, with practically full selections. As long as prices went up and there remained the slightest deficiency in the assortments, it was natural that yardmen should try to make up these deficiencies, so as to be prepared for every requirement upon them; but now that the upward movement seems to have been halted, the disposition to wait until actual needs develop is apparently more pronounced, and the sellers are obliged to put forth greater effort than was called for not long ago to do the same volume of business. As stated, this does not mean that any weakness has manifested itself in the trade. The requirements of the buyers are evidently still such as to take up the output of mills, and no extensive accumulations are to be found; but the feeling is, none the less, somewhat easier, and the urgency of the requests for lumber has abated in a measure. To be sure, no pressure is exerted by the sellers to place stocks, the market being allowed to take care of itself, in a way; but the salesmen are more diligent in calling upon their customers, while the consumption is about holding its own. There is a prospect that the destruction caused by the western floods will bring out larger requirements than would otherwise have been the case. It is not so much that the high water compelled mills to suspend operations or that logs were carried away, although here and there losses of this sort are also to be noted, but that there must be a replacement in a very short time of much material needed for building and that houses wrecked must be erected to shelter the thousands rendered homeless. This may be expected to create an exceptional drain upon the sources of supply and help the hardwood business of this section.

As for prices, they are being maintained at their old level, no weakening having occurred in any direction. The improvement with respect to extra wide poplar continues, and chestnut in all of its divisions is not less active than it has been, with sound wormy commanding ready takers at quotations about $3 higher than last summer and fall. To an appreciable extent it is the more pronounced quiet in the export business which is reflected in the trade generally. The stocks in the foreign markets are relatively large and the buyers abroad are disposed to hold out for concessions, which the shippers are not in a position to make. At the same time, no curtailment in the forwardings is to be noted, some of the steamers that left here during the last few weeks carrying large quantities of hardwoods. Should the strike in Belgium continue for any length of time it may make a difference in so far as some of the continental European markets are concerned. The general situation, of course, is also influenced in a measure by the feeling of uncertainty as to the political situation and the practical effect of the economic change being effected. No one knows exactly what these changes may mean and whether they will not call for a more or less extensive readjustment; and until the outlook becomes more clearly defined a measure of hesitancy in the demand for hardwoods may be expected to manifest itself.

COLUMBUS

Despite the disastrous flood which devastated a portion of Central Ohio during the latter part of March, trade in hardwoods in Columbus and vicinity has been fairly active. The demand both from retailers and factories is good and prices are ruling firm in every particular. The tone of the market is satisfactory and the outlook for the future is promising.

One of the best features of the trade is the lack of stocks in most varieties and this means a continuation of the high prices. Dry stocks in every locality are scarce and every effort on the part of mill owners to increase them has not succeeded. Stocks in the hands of retailers are only fair, which means they will be in the market for larger orders just as soon as the building season begins. Factory stocks are also small.

Factories engaged in making vehicles, implements and furniture are the best buyers now although other lines are also buying well. The feeling in manufacturing circles generally is good.

The indications are bright for an active building season. Architects and contractors are busy on plans and contracts and in many cases work has started in earnest. The recent flood which destroyed and damaged hundreds of homes in Columbus will be the means of stimulating the trade to a large degree.

Plain oak is strong in every way and orders are coming in well. Both red and white oak are in demand. Quartered oak is also strong and the volume of business is good. Poplar is gaining in strength and automobile concerns are good buyers. Both ash and basswood are strong and prices are ruling high. Other hardwoods are unchanged.

CINCINNATI

Weather conditions are much more favorable at this writing than they have been for some time. All of the yards are again in good shape and it is remarkable that so little damage to lumber interests has resulted, the principal loss being in labor in making preparations for the high water and cleaning up afterward. Much of the lumber that was delayed en route to Cincinnati on account of the flood is now arriving and the dealers are hustling to take care of it in order to hasten the release of cars and the congestion of all of the yards in the city. Considerable stock

is being shipped on some long delayed orders; but railroads running out of here are all about in condition to accept shipments for all points, to furnish equipment for loading promptly and switching cars with but little delay.

There is a steady demand for most all of the hardwoods and inquiries are numerous, coming from large buyers who are apparently feeling out the market before placing some good sized orders. Quotations at top prices are resulting in substantial orders and the tendency is to even stronger demand. Nothing on the list is as strong as plain oak. Those having stocks of this wood are letting it go only at top prices. Quartered oak is moving well and ash is almost as strong as plain oak with conditions practically the same. All low grades of hardwoods are scarce. Good grades of gum, poplar, and cottonwood are in steady demand. Chestnut in all grades is scarce and prices are very satisfactory. Almost any kind of hardwood suitable for cutting up in factory trade is in demand and it is a question of supplying the demand rather than finding a place to put the stock.

Hardwood flooring is not very active as yet, as it is a little too early in the season, but all local mills are very busy and none feel that they have any too much stock on hand as the demand for this stock is growing fast and an exceptionally good season is looked for this year. Prices are high and dealers are expecting to get even better prices on account of the increased cost of rough lumber.

The demand for poplar is good and low grades are as scarce as ever and just as high in price. No. 1 common and better is moving well and wide stock is having a satisfactory call. Dealers are much encouraged and feel assured of a satisfactory year in poplar in all grades. At mill points manufacturers are well supplied with orders and are not taking any orders except at top prices for any grades. They predict a much stronger tone to the market as the season advances.

INDIANAPOLIS

There has been no particular change in the hardwood situation during the last two weeks. Some inquiries and a few orders have been received, but business has not been brisk, by any means. It is improbable that there will be any rush in business for several weeks to come. Most of the lumber business in this vicinity is for heavy bridging timbers.

Both wholesalers and retailers are experiencing some delay in moving shipments. Nearly all railway lines have resumed normal traffic, but as there was a serious congestion of freight at almost every point while several railway lines were out of commission, it may require several weeks to get shipping straightened out again.

Hardwood prices have not changed and a scarcity of one-inch oak continues.

MEMPHIS

The demand for hardwood lumber here is quite active and those firms which are not affected by the rise in the Mississippi are shipping as rapidly as they can get their stock ready. It seems that these firms are securing more than their share of the business offering for the reason that so many here and elsewhere in this territory are out of commission either directly because their plants and yards are overflowed, or indirectly because switching facilities are so seriously impaired. The markets continue in strong position and the curtailment of production is reflected in decreasing stocks. Members of the trade here believe that prices will work to a higher level under the combined influence of the excellent demand and reduced output.

The market for plain oak is particularly strong on all grades. Offerings are not large. Quartered oak is also in better demand than it has been recently and prices are somewhat firmer. There is a splendid demand for all grades of gum, with the exception of No. 1 firsts and seconds red, which are rather quiet. The lower grades are particularly strong and offerings are comparatively light. Low-grade cottonwood is another item which is also in very keen request and offerings are small. The upper grades of cottonwood are selling at a moderate rate but they show neither the activity nor strength noted in the case of the lower grades. The cottonwood output has been adversely affected by the flood situation here and throughout the Memphis territory. Ash is in active demand in all grades and prices are firm. In cypress the best demand is for selects. Prices on these are quite firm and offerings are not large. The remainder of the cypress list shows rather increased activity but the demand for these grades is not so keen as for selects. The export business is being affected adversely to a slight extent by the strike in Belgium.

NASHVILLE

No apprehension appears here as to any harmful effect on the local market as a result of the pending federal tariff consideration or legislation. The local hardwood market is strong and prices generally rule stiff. There are very active shipping demands. The calls for plain and quartered oak are reported more active than for twenty years past by some dealers. The manufacturers and dealers here, in fact, find it difficult and sometimes impossible to meet the demands for these grades. Poplar is in good demand. Chestnut shows a good call with the lower grades especially active. Walnut and ash are in good call. Basswood, cottonwood, elm and hickory are steady but show no changes. There have been no

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38,000′ 1 x 12″ & up No. 1 & 2 Chestnut
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58,000′ 6/4 No. 1 Com. Chestnut
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19,000′ 8/4 No. 1 & 2 Red Birch
86,000′ 3″ No. 1 & 2 Red Birch
6,000′ 4″ No. 1 & 2 Red Birch
21,000′ 5/4 No. 1 & 2 Cherry
10,000′ 8/4 No. 1 & 2 Cherry
88,000′ 4/4 No. 1 Common Cherry
19,000′ 5/4 No. 1 Common Cherry
10,000′ 8/4 No. 1 Common Cherry

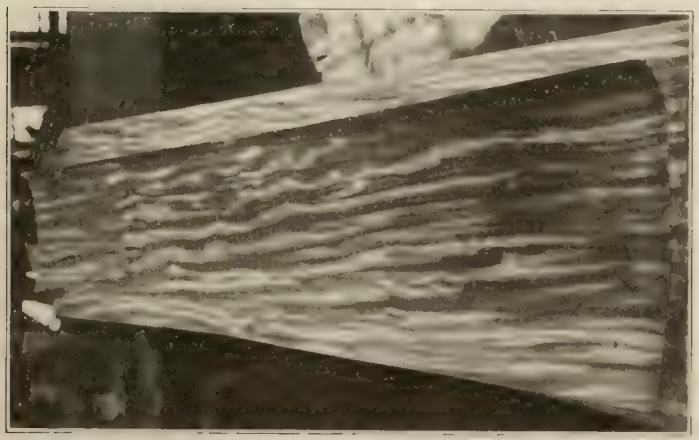
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special features on the market during the week. Shipments were considerably delayed for a time as a result of the floods to the north of Nashville, but these conditions are now improved. Thousands of logs were entirely lost by reason of floods in the Cumberland river and tributary streams. The flooring plants show increased activity, some reporting a thirty per cent increase in business. Consuming factories are anxious to place orders and get shipments through. Good receipts of logs resulted from the recent high tides in the Cumberland river.

BRISTOL

Lumbermen here report that business is holding up well. They say that there has not been the increase in demand that was expected but that present conditions do not justify any complaint. The feeling is general that the present flourishing condition of the lumber industry will continue through the year, unaffected by tariff revision at the hands of the democrats in congress. The feeling hereabouts is that the lumber tariff question is not one of great moment to the South.

Prices are firm and have held so, despite the increasing demand, especially for certain stocks. There are many buyers in this territory in search of stock.

LOUISVILLE

Trade conditions are maintaining the excellent aspect which they have held since the first of the year, the interruptions due to storms and floods not having been of serious consequence, judging from the number of inquiries and orders that have poured in since normal conditions of transportation and communication have been established. Leaders in the business are optimistic as to the next four or five months, but under no circumstances is it safe to make a prediction covering an entirely new set of conditions such as are usually introduced within six months. Looking at the situation with a view to promising crop prospects, generally sound industrial and financial conditions, and present prosperity, there seems to be good reason to hope for a continuance of the situation as it is at present. Tariff revision, while it cannot affect the hardwood trade, in the opinion of local lumbermen, may hurt indirectly through upsetting conditions in other lines; but in view of the promise of rapid disposition of this troublesome matter, it is believed that untoward influences from this source will be disposed of in the near future. Oak lumber of all kinds is in good demand. Ash is strong and chestnut is also in good demand at stiff prices. There is hardly a slow item on the list, and everybody is busy.

ST. LOUIS

Hardwood conditions showed but little change during the past fornight, nearly every item on the list being in demand. Many of the items are badly broken and short. Oak still continues the strongest in demand and dry is extremely scarce, in fact can hardly be obtained. The lower grades are stronger in price than they have been and are called for more freely than they have been. Ash is also a good seller. Gum is moving nicely. Poplar in wide and better grades sells better than those in the lower grades. Cottonwood is also in good request, with stronger prices in sight. The cypress situation is about as it has been for some time. Prices are holding up. A better demand is anticipated now that building operations have started. Quite a nice stock of this item is in St. Louis and there is no trouble in filling all orders that come in.

MILWAUKEE

The favorable weather all over the state is adding new life to building operations and has resulted in a much better demand for lumber in all lines. It has aroused retailers to the realization that stocks in their yards are at a low stage and in most cases inadequate to meet the demands of the season.

The shortage in dry stocks at the northern mills is causing considerable concern and wholesalers say that it means delay in the filling of orders in almost every instance. Prices are much higher than a year ago at this time, a natural result of the improved demand and the shortage of dry stocks. Considerable stock in half-dry condition is expected to be shipped into the local market because of the scarcity of dry stuff. Basswood is beginning to arrive here, but birch will not put in an appearance until next month. About all the available birch left is No. 1 and No. 2 stock, while basswood and maple are scarce. The flood situation in the South has tended to decrease shipments of oak and the supply of both plain and quartered lines is getting low.

The sash and door concerns are buying more freely, as they are preparing for the building rush. The local furniture factories are placing some good orders. Local heavy machinery manufacturing concerns are meeting with a brisk business and are buying fairly well in the various lines of hardwood which they need.

CADILLAC

Low stocks of dry hemlock and hardwoods, with an almost abnormal demand for same, is the condition of the market here. Because of scarcity

the prices of the rough hemlock and hardwood lumber, as well as that of maple flooring, have advanced, and a considerable amount of shipping, especially of the flooring, is being made.

DETROIT

The general condition of the Detroit hardwood lumber market is encouraging, with prospects favoring a continuing increase in business. The demand for all kinds of hardwood is exceedingly brisk, and the only drawback has been that the demand is far in excess of the supply. One-inch birch, one and two-inch maple, dry ash and all grades of crating lumber are scarce. However, the hardwood men are living in hopes that with the arrival of the first lumber boats from the North this condition will be overcome to a large extent, and that by the middle of May business will assume its normal aspect. The hardwood flooring trade and the veneer and box trades are busy. Prices on all grades of hardwoods are high and have remained practically stationary the past two weeks.

LIVERPOOL

The market position is a little firmer than during the past few months of this year, though no appreciated rise in values has yet been noted. The mahogany position, however, has shown some change and the wood sold at the last sales found quick markets in readiness. In fact it has been a matter for considerable surprises how quickly of late the sale yards have been cleared after each succeeding sale. Quite the strongest item on the market at the present is ash. All ash planks of prime quality are wanted, especially three-inch stock, while No. 1 common stocks of wide average also find a good market. Hickory is not strong—in fact the market is decidedly weak—though it is surprising, in view of the shipments, that the stock is so very light. The heavy nature of shipments has frightened buyers away, and shippers have been very foolish in flooding this market as they have done. There is a very steady and keen demand for hickory here, but the market is very sensitive and cannot stand up with firm prices if large quantities come on consignments. About 2s 9d exquay is the present market price.

Round ash on the other hand is very firm—the result of an entire absence of any extensive shipments on consignments. Birch should also be a good point for new shipments, and as the new wood will soon be here, operators in this stock are keenly calculating its value.

Tupelo is showing favor at this port. A car of box grade, ¾ by 8" and up, was seen on the quay recently and was sold readily. Shipments of 5/8" by 12-16" would come to a good market and contracts could readily be made for the right stock.

Cottonwood shipments have been selling well but the market is now fully supplied. Poplar stocks keep moving promptly and prices keep firm. Prices are, of course, high and shipments on consignments are not advised unless shippers are prepared to make a sacrifice. Wagon oak is good and the regulation sizes are moving well. Round oak logs keep moving and quite a large number have been sold this year.

GLASGOW

The local timber trade continues to display rather a dull tone, and though sales reported are fairly numerous, they are largely of a retail character. The current high prices tend to restrict forward buying, and another adverse factor is that freights are now much weaker. Nominally spruce deals and rigas are as firm as before, but although this is the case, the margin of profit is a very small one compared with other ports. In a few recent cases storing has been resorted to where a satisfactory price could not be obtained. It would be much better, however, to modify prices a little, as it is usually found that after storage charges are incurred it is difficult to get "one's own back." Arrivals of birch logs have been unusually heavy during the first quarter and imports should be curtailed for a short time.

The "Tritonia" and "Kastalia" have arrived from Newport News and Baltimore with the usual varied cargo of American hardwoods. Old boards and planks have come in fairly plentifully and have sold well, but if the imports continue so heavy it will be difficult to maintain prices.

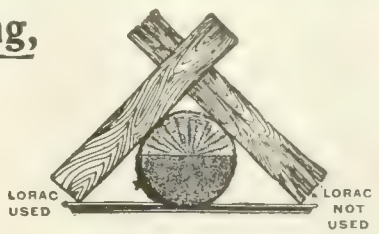
Trade continues good in all departments of shipbuilding and it is still the main outlet for timber of all kinds. Although a comparatively small number of new contracts were reported to have been placed during March, there is an ample amount of work on hand to keep the yards busy for some time to come. The figures for the first quarter show a decrease in the output of nearly 17,500 tons less than the corresponding period of last year. It is probable, however, that in the course of the next month or two the decrease in the output will be more than made good, as there are several large vessels now approaching the launching stage in Clyde yards. The most notable among these is the large new Cunarder—"The Aquitania"—which will be launched next month.

It is evident that cheaper freights are to rule. Shippers on the other side who have tonnage in hand will fare badlly, because, where, in the case of pitch pine, a week ago quotations for 30-foot average ruled about 92/6d to 95/, it is said that as low as 87/6 would be accepted. Now offers for 30-foot average for May-June shipment are being solicited at 85/. In any case, most shippers will lose to some extent. The foregoing remarks, however, apply only to freights from the Gulf, as Quebec rates are still on a steady basis.

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are always in evidence, always of interest. Here is the record of southern pine timber values for the last thirty-three years:

1880, per acre			$1.25
1890, per acre	$5.00	to	7.50
1895, per M	.25	to	.75
1900, per M	.75	to	1.50
1905, per M	2.00	to	3.00
1910, per M	3.00	to	4.00
1913, per M	3.50	to	5.00

Here is another record:

In 1880, 5,000 to 7,500 feet of logs were cut from an acre of southern pine timber; in 1890, 7,500 to 10,000 feet from lands of the same character; in 1900 such lands produced 10,000 to 12,500 feet; in 1910 and today 12,500 to 15,000 feet are secured.

These are facts. Fix them in your consciousness, act on your mature conclusions and the continuous increase in timber values will benefit you.

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BECAUSE it is the oldest and strongest inter-insurance association among lumbermen, being now in its fourteenth year.

BECAUSE $728,910.41 cash savings have been returned to members.

BECAUSE $756,787.21 cash surplus, owned entirely by the members, has been accumulated.

BECAUSE $2,012,427.96 has been paid in losses under prompt and equitable adjustments without resort to quibbling or technical controversy.

BECAUSE it was the first to settle lumber losses on a market value basis.

BECAUSE the regular, frequent and thorough inspections given the plants of all members help them to prevent fires, thus materially reducing both the fire waste and the cost of indemnity.

FOR FULL PARTICULARS ADDRESS

Harry Rankin & Co.
Attorney in Fact,
KANSAS CITY, MO.

Western Representative
HARRY B. CLARK,
Portland, Ore.

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EMPLOYES WANTED

LUMBER BUYER AND INSPECTOR

wanted. Large furniture manufacturer in Wisconsin using six million feet of hardwood lumber per annum has a good position for man of experience in buying and inspecting hardwood lumber. Must have large experience and first-class references. Address

"BOX 42," care HARDWOOD RECORD.

WANTED

Good hardwood lumber inspector, largely yard work. Address OHIO RIVER SAWMILL CO., Louisville, Ky.

EMPLOYMENT WANTED

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St., Buffalo, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

TWO LARGE AND ONE SMALL

Tract timber in Chesapeake & Ohio and Norfolk & Western Railways, in Virginia and West Virginia. G. T. THAYER, Charleston, W. Va.

VIRGIN FORESTS IN THE CAROLINAS

65,000 acres virgin forest on the Georgia and Carolinas Southern Railroad, and Chattanooga and Whitewater Rivers; 400,000,000 feet hemlock, chestnut, white and yellow pine, oak, tannic acid wood, pulp wood, and tan bark. Rate, Cincinnati, 16 cents. Price $15 per acre, including water rights. BOX 2266, Washington, D. C.

HARDWOOD TIMBERLANDS

We have several tracts of hardwood timber lands, all sizes, located in western N. C. and East Tenn. We have the quantity, the quality and our prices are right. Address

SOUTHERN STATES REALTY CO.,
610 Vandeventer Building, Knoxville, Tenn.

ARE YOU INTERESTED IN GUM

and Red Oak?

I own in fee simple two small and carefully selected tracts of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

FOR SALE—VALUABLE TRACT OF

Hardwood Timber; 7,000 acres virgin forest immediately on branch line of the Southern Ry. in western N. C.; title perfect. For further information address, F. R. HEWITT, Hewitt, N. C.

LUMBER FOR SALE

FOR SALE

3,000 to 4,000 cubic feet of Florida aromatic red cedar. Would like to hear from a pencil manufacturing company if in need of cedar. Address C. B. JOHNS, Box 74, Ebensburg, Pa.

FOR SALE—FOR QUICK SHIPMENT

30,000 ft. 5/4 dry Basswood, about ⅔ 1sts and 2nds, ⅓ No. 1 common.

VAN KEULEN & WINCHESTER LBR. CO.,
Grand Rapids, Mich.

FOR SALE—THE ENTIRE CUT OF

my mill, just beginning in virgin forest of post oak, red and white oak and pine. Will make an attractive price to some one to take entire cut. W. C. BYINGTON, Fountain Hill, Ark.

DIMENSION STOCK FOR SALE

FOR SALE—SCRAP ROSEWOOD

10 to 20 tons East India Rosewood cuttings.
THE BRUNSWICK BALKE-COLLENDER CO.,
623 S. Wabash Ave., Chicago, Ill.

DIMENSION STOCK WANTED

WANTED—HARD MAPLE SQUARES

3½x4½", 4x5", 4½x5½", 5x6" and 6x6". Lengths 6", 7", 8, 12 and 14 ft. No. 1 common and better grade. Highest cash price paid. Also 1" white basswood x 4" and up wide, 8 to 16 ft. long. Write us today. HALL BROS.,
174 Mutual St., Toronto, Ont.

WANTED

DIMENSION OAK
Plain and Quartered

Various sizes for chair and table factories.
Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,
New York.

WANTED

Hard Maple and Beech Squares 42", 44", 48" long, plump 1" x 1". Must be clear and straight. If you have any to offer write us. Will take them dry or green.

THE COLUMBIA MFG. CO.,
New Philadelphia, Ohio.

POPLAR DIMENSION STOCK

Glued-up for piano cases. Will furnish full particulars to concerns able to turn out this class of stock in carload lots. Good prices. Cash payments. Address, "BOX 39," care HARDWOOD RECORD.

LUMBER WANTED

WANTED

5/4 and 8/4" log run Cherry. Also other thickness. Cherry logs. 4/4" No. 3 common hardwoods, any kind. Also clear Hard Maple axles 4½"x5½"x6' long.

WARREN ROSS LUMBER CO., Jamestown, N. Y.

WANTED

200 M ft. 4/4 Quartered White Oak.
200 M ft. 4/4 Plain White Oak.
200 M ft. 4/4 Chestnut.
100 M ft. 4/4 Poplar.
All grades.

STANDARD HARDWOOD LUMBER CO.,
Buffalo, N. Y.

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg.,
Chicago.

WANTED FOR CASH

less 2% discount, 20 cars 3" Hard Maple, all grades, green or dry. Mill inspection if desired. Can also use some 6/4".

CYRUS C. SHAFER, South Bend, Ind.

SOFT ELM

7/8x4¼x18
7/8x8½x26½

ELM, ASH OR HICKORY

1¼x1⅜x40
1½x1½x40

OAK

2x2x30—28—25
1½x1½x40—24, 20—18
1x4x20—17—12
1¼x4x19
1x1x19

Address "BOX 43," care HARDWOOD RECORD.

WANTED

5 cars 4 4" 1sts & 2nds Brown Ash, Dry.
1 car 5 5" 1sts & 2nds Brown Ash, Dry.
1 car 8/4" 1sts & 2nds Brown Ash, Dry.
1 car 5 4" 1sts & 2nds Brown Ash, Dry.
Quote prices delivered Boston, Mass.

PLACE BROTHERS, INC.,
131 State Street, Boston, Mass.

WANTED—BLACK WALNUT LOGS AND LUMBER

Good sound walnut logs 14" and up in diameter, either hewed or rough. Will inspect and pay cash at shipping point. J. W. COMLY,
Exporter, Steubenville, Ohio.

WANTED

500,000 feet 4/4" sound wormy Chestnut, dry. Quote cash price Boston rate of freight. State when you could commence and complete shipment. Address, "BOX 37," care HARDWOOD RECORD.

WANTED TO BUY

100,000 feet 4/4, 5/4 and 6/4 log run Butternut.
DUHLMEIER BROTHERS, Cincinnati, O.

MOULDINGS AND TRIM

In Oak, Chestnut and Basswood, straight and mixed cars. Can use four cars per month. We pay cash and will advance payments if convenient. Address, "BOX M," care HARDWOOD RECORD.

BUSINESS OPPORTUNITIES

FOR SALE—MODERN VENEER PLANT

together with timber holdings. Located in large timbered district. Address
"BOX 45," care HARDWOOD RECORD.

FOR SALE—WHOLESALE AND RETAIL

lumber and building material yard, located in fast growing town in the heart of the eastern Kentucky coal fields, on two trunk line railroads. Distributing point for Ky., Tenn. and Va. Price and terms right. For particulars address
BOX 578, Middlesborough, Ky.

FOR SALE—4,000 ACRES TIMBER

and sawmill having capacity of 50,000 feet a day at Robinwood, Miss. Great bargain and easy terms. For full details write
FRANK S. HAAG, Henderson, Ky.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address
"BOX 72," care HARDWOOD RECORD.

MACHINERY FOR SALE

LOCOMOTIVES FOR SALE

2 18-ton Climax 3 ft. gauge locomotives;
One 6 ft. Smith, Myers & Schnier band mill;
One 75 ton H. P. Corliss engine.
J. H. NORTHRUP, Louisa, Ky.

BARGAIN IN
BOILERS AND ENGINE

1 300 H. P. Locomotive. Fire box boiler, 125 lb. working pressure allowed by Hartford Ins. & Insp. Co. 60 ft. 44" stock.
1 14x20 self-contained Automatic Brownell Engine.
2 60" Horizontal tubular boilers.
Also
1 50" Shaving Exhaust Fan.
42 ft. 10" Steam Feed.
Full specifications furnished on application.

JOHN S. OWEN LUMBER COMPANY.
Owen, Wisconsin.

FOR SALE

One left-hand Phoenix 6 foot Pony Band Mill with Carriage, Track, direct Steam Feed and Live Rolls. Used less than two years. In fine condition.

WESTERN COTTAGE PIANO & ORGAN CO.,
Ottawa, Ill.

MISCELLANEOUS

WANTED—HARDWOOD LUMBERMEN—

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on waterproof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns. HARDWOOD RECORD,
537 So. Dearborn St., Chicago.

Special Inducements TO Wood Working Plants

We know of several very desirable locations for Wood Working plants near to the country's **greatest source** of **hard woods** and where **prices** are the **lowest in America.**

Ample labor, low priced power and excellent transportation facilities go to make these openings very desirable.

Extra inducements as free sites, tax exemption or stock subscriptions will be given manufacturers of good faith and ability.

Our free services are at your command in aiding you to find a favorable location.

M. V. Richards
Land and Industrial Agt.
SOUTHERN RAILWAY
Room 305 Washington, D. C.

CHICAGO

Osgood & Richardson
935 Peoples Gas Bldg.

NORTHERN AND SOUTHERN HARDWOODS

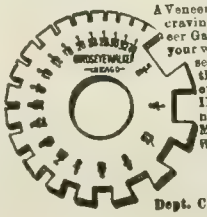
Chicago Agents: LAMB-FISH LUMBER CO.

E. B. NETTLETON
Southern
Hardwoods
Pacific Coast Woods and Box Shooks
FISHER BUILDING CHICAGO

E. H. KLANN LUMBER CO.

Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

819 FISHER BLDG. HAR. 1187



A Veneer Gauge is the answer to a Veneer User's craving for years. This "Walker Brand" Veneer Gauge is a steel gauge that will satisfy your wants for all time. You can't do yourself a better turn than to buy one of these gauges. It gauges ACCURATELY every thickness from 1-40 inch to ⅝ inch INCLUSIVE. Wake up to this opportunity. Price only $1.98 delivered by U. S. Mail. Order now, today. Address—6456 Woodlawn Ave. Phone Hyde Park 88.

Dept. C **WALKER** BIRD'S EYE
CHICAGO

99% PURE
SILICA
OR SILEX FOR WOOD FILLERS
TAMMS SILICA CO., 19 So. 5th Ave., Chicago

COUNTERFEIT CHECKS

are frequent except where our

Two Piece Geometrical Barter Coin

is in use, then imitation isn't possible. Sample if you ask for it.

S. D. CHILDS & CO.
Chicago

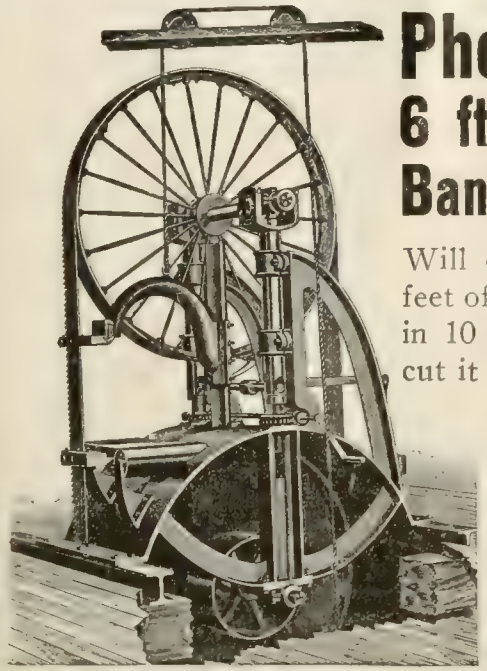
We also make Time Checks, Stencils and Log Hammers.



Gerlach Modern Machines

COOPERAGE STOCK and BOX SHOOKS
Circular, Band and Cylinder Saws
SAW AND LOG TOOLS
THE PETER GERLACH CO., Cleveland, Old City, U.S.A.

¶ **The Gibson Aluminum Tally Book Cover and Tally Tickets are now employed by more than 2,000 lumber manufacturers, dealers and consumers.**



Phoenix 6 ft. Pony Band Mill

Will cut 30,000 feet of 1" lumber in 10 hours and cut it good.

Nearly 200 of these mills sawing wood in the U. S. A.

PRETTY GOOD RECOMMENDATION, ISN'T IT?

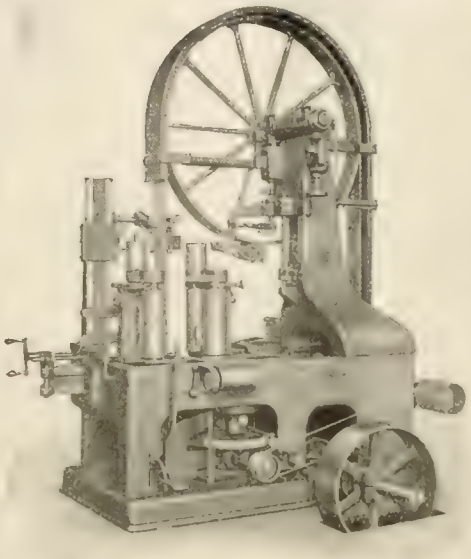
MODERATE PRICE

PHOENIX MFG. CO.

EAU CLAIRE WISCONSIN

Recommended

a Specialty ~~Not a Side Line~~ BAND RESAWS



Kansas City, Kansas, March 29th, 1913.

Wm. B. Mershon & Co., Saginaw, Mich.

Gentlemen:

Referring to the Mershon NEW Standard 60" Band Resaw we recently purchased, we are delighted to say that this is the second of these machines we have purchased, and we are finding it entirely satisfactory in every way. The machine requires very little attention further than lubrication. We heartily recommend it.

Yours very truly,

KANSAS CITY PACKING BOX CO.

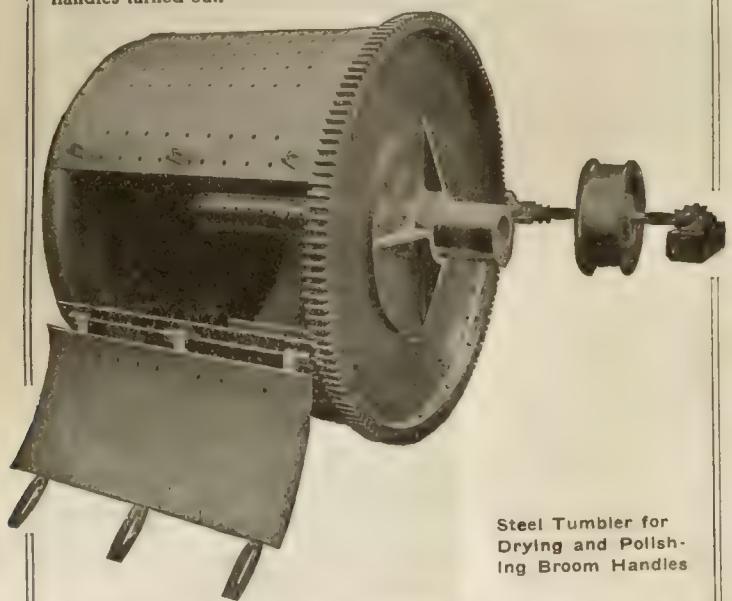
New Standard 60-inch Band Resaw

Wm. B. Mershon & Co.

SAGINAW MICH.

Broom Handle Machinery

Let us tell you about our **STEEL TUMBLERS FOR DRYING AND POLISHING BROOM HANDLES.** This system is rapidly supplanting all others. More economical; less time required for drying; no polishing afterwards; greater per cent of straight handles turned out.



Steel Tumbler for Drying and Polishing Broom Handles

CADILLAC MACHINE COMPANY

Complete Line of Broom Handle Machinery

CADILLAC, MICH.

ELEPHANT RUBBER **BELTING**

AIR DRILL AND AIR TOOL **HOSE**

STEAM
WATER
SUCTION

EXTRA QUALITY

Recommended for hard service and guaranteed to do the work



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CRANE COMPANY - - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

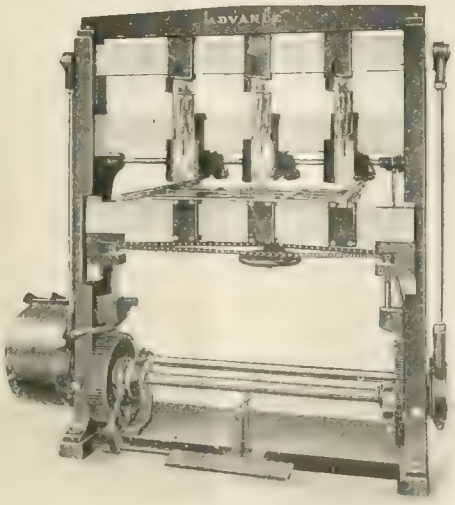
THE MECHANICAL RUBBER COMPANY

(Chicago Rubber Works)

307 W. Randolph Street, CHICAGO

ESTABLISHED 1882

Wire Stitching Machinery



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Crates, Veneer and Resawed Lumber Boxes, Also Wire and Metal Bound Boxes,

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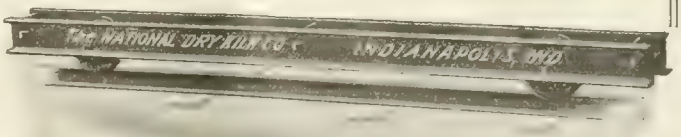
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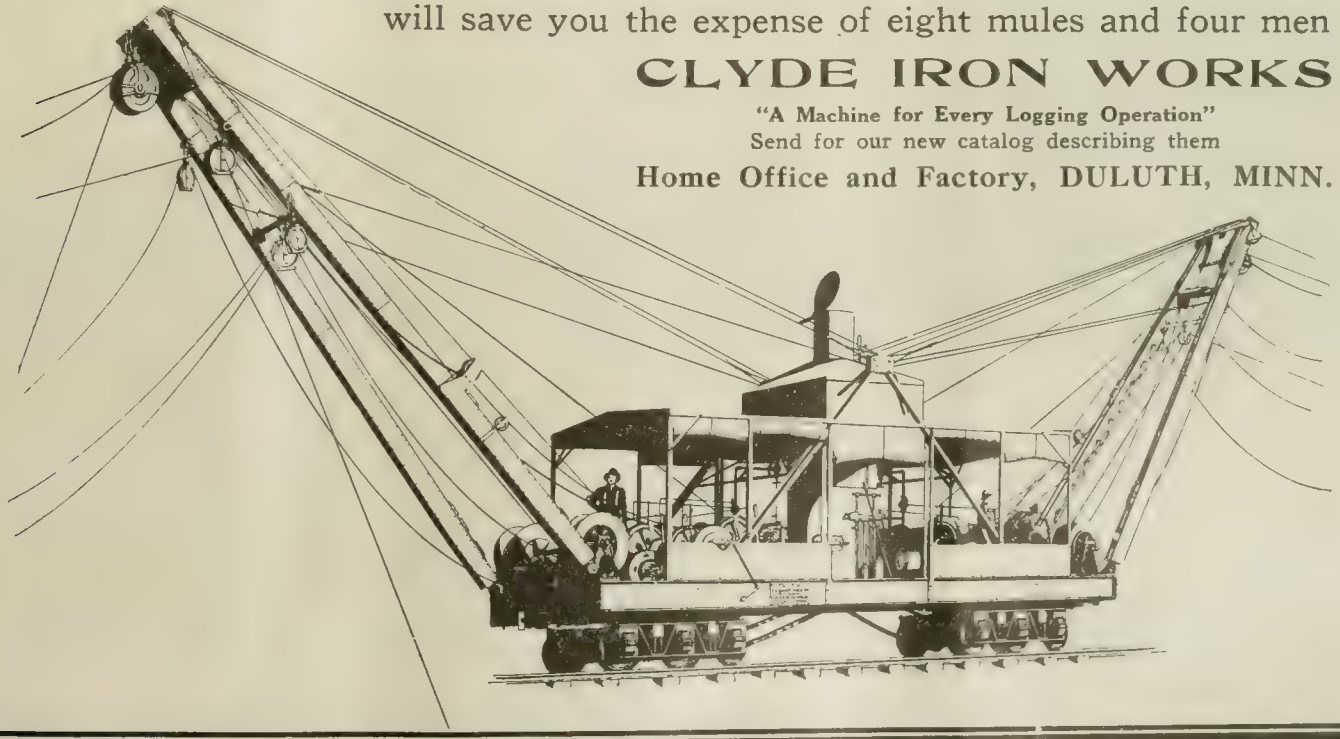
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By Henry H. Gibson, Editor Hardwood Record
Edited by Hu Maxwell, Wood Utilization Expert

The Work Involves:

First: A botanical description of the more than 300 species of American forest tree growth.

Second: A physical description of the wood of these species.

Third: A recital of the chief uses of all important American woods, together with suggestions of advantageously broadening their uses.

Fourth: Complete information concerning the range of growth of all varieties.

Fifth: Related trees are logically grouped according to families and species; important species covered in substantial detail, and brief mention of the woods of minor importance.

Sixth: Scientific name of each tree is recited, as well as the various common names by which it is recognized in different parts of its range of growth.

Seventh: The properties of the various woods are carefully analyzed, particularly weight, hardness, stiffness, strength, elasticity, toughness, color, figure, and seasoning and lasting properties.

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If you want to reach the wholesale consumers of hardwood lumber throughout the United States, a HARDWOOD RECORD advertisement will do it for you.

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We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

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WE manufacture all kinds of panels from the various woods usually used for that purpose.

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Custom Mill Work, Storage, Inspection

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Foreign Fancy Woods, Mahogany, Cedar, Circassian

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WE IMPORT WE MANUFACTURE

All Thicknesses of Mahogany
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250,000 feet of 4/4 No. 1 Common & Better. Old grading.

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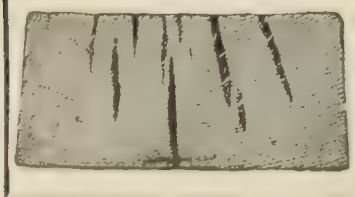
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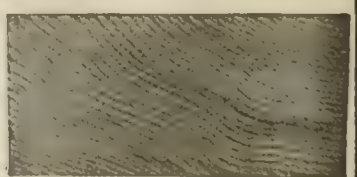


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We want to buy for cash
OAK, ASH AND OTHER HARDWOODS
All grades and thicknesses.
Will receive and inspect stock at shipping point.
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5-8 and 4-4 in Wide Stock, Specialty

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With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

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LUMBER CO.

Hardwood Record

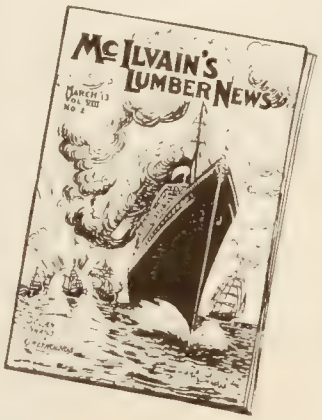
Eighteenth Year, Semi-Monthly.

CHICAGO, MAY 10, 1913

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60% 14′ and 16′

1 car 5/4″ x 11″ & wider 1s & 2s Plain Red Oak

10 cars 4 4″ x 6″ to 12″ 1s & 2s Cottonwood

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FAMOUS FOR HARD MAPLE AND GREY ELM

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We Offer for Prompt Shipment

150,000 Feet

Dry 1 x 7 and wider Basswood Firsts and Seconds. Run about 75% clear, the defects are small and the stock is very bright and nice.

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7 and 8 inch	34%
9 and 10 inch	35%
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Wider than 12 inch	4%

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10 and 12 feet	20%
14 feet	20%
16 feet	49%
Odd lengths	3%

April 10, 1913

COBBS & MITCHELL, Inc.

Sales Department

CADILLAC MICH.

Mitchell Brothers Co.

Sales Department

Cadillac, Mich. **April 10, 1913**

Dry Michigan Hardwoods

1x4 Basswood No. 1 Common	11 M
4/4 Cadillac Gray Elm 1s & 2s	25 M
1x6 Maple 1s & 2s	21 M
1x9 Maple 1s & 2s	16 M
4/4 White Maple, End Dried	16 M
5/4 White Maple, End Dried	4 M
4/4 Birdseye Maple, End Dried	3 M
4/4 Soft Maple, No. 2 Common & Better	9 M

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FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES

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Kneeland-Bigelow Company

Hardwood Manufacturers

100,000 ft. 5/4 1st & 2nds Basswood

All of the above stock is nicely manufactured, being hand sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

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PRIMA VERA
(WHITE MAHOGANY)

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VENEERED PANELS
ALL WOODS
SEND FOR STOCK LIST
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Estabrook-Skeele Lumber Co.
MANUFACTURERS AND DEALERS IN
Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods
In the Market for Round Lots of Hardwood
WRITE US BEFORE SELLING
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RED BOOK Published Semi-annually in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the **United States, Alberta, Manitoba and Saskatchewan.** The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

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MAPLE AND BIRCH FLOORING
of unexcelled manufacture and quality. Also Manufacturers of Basswood, Birch, Elm, Maple and Hemlock.

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THE GREATEST HARDWOOD MARKET IN THE WORLD

15,000,000 FEET ALWAYS ON HAND



Stop Burning Incense

to poor grades. Save waste and swell your dividends by buying hardwood lumber that is perfectly band-sawn from the finest timber that grows in Arkansas and Missouri. Our stock is of fine widths and lengths, fat thickness and the highest standard of grades.

"WISLUMBCO STANDARD"

50,000 ft. 4/4x6 to 9" 1st & 2nd Plain White Oak (Special).
12,000 ft. 6/4 1st & 2nd Pl. Red Oak.
30,000 ft. 6/4 No. 1 Common Plain Red Oak.
50,000 ft. 4/4 1st & 2nd Red Gum.
75,000 ft. 4/4 No. 1 Common Red Gum.
50,000 ft. 4/4x13 to 17" Box Board Gum.
60,000 ft. 4/4x13" & wider 1st & 2nd Sap Gum.
75,000 ft. 4/4x13 to 17" Box Board Tupelo.
30,000 ft. 4/4x13" & wider 1st & 2nd Tupelo.
75,000 ft. 4/4x6 to 12" 1st & 2nd Tupelo.
15,000 ft. 4/4x13 to 17" Wormy Box Board Tupelo.
50,000 ft. 4/4 Select Cypress.
75,000 ft. 4/4 Shop Cypress.
75,000 ft. 4/4 No. 1 Common Cypress.
50,000 ft. 4/4x18" & wider No. 1 & Panel Cottonwood.
75,000 ft. 4/4x13 to 17" Box Board Cottonwood.
50,000 ft. 4/4x9 to 12" Box Board Cottonwood.
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50,000 ft. 6/4 Log Run Soft Maple.
25,000 ft. 8/4 No. 2 Common & Better Hickory.

We also have a good stock of other Southern hardwoods

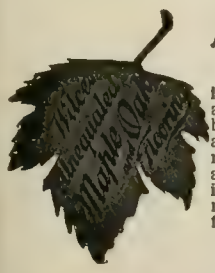
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Mills: Huttig, Ark. Deering, Mo. Chicago

Ready for Shipment About June 1st

Ten cars
4/4 No. 1 Common & Better Birch
Five cars
6/4 No. 1 Common & Better Birch
Two cars
8/4 No. 1 Common & Better Birch
Two cars
4/4 No. 2 Common & Better Ash
Five cars
4/4 No. 2 Common S. Elm
Five cars
4/4 No. 3 Common Birch
Two cars
4/4 No. 3 Common S. Elm
Five cars
4/4 No. 2 Com. & Better Basswood

Above cut from virgin timber. Grade and manufacture are first class.

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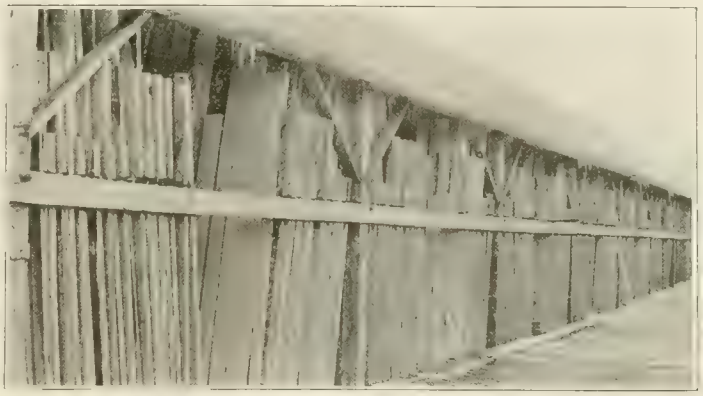
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Hardwood Record



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LIBRARY NEW YORK BOTANICAL GARDEN

Review and Outlook

General Market Conditions

THE HARDWOOD MARKET throughout the country has not been marked by any particularly prominent features during the past two weeks. The condition causing most comment is the fact that while there has been some recession in actual demand in most markets, this recession has not in any instance been accompanied by even an indication of demoralization of prices. It is true that the rapid, and in many cases not altogether to be desired, advance in hardwood quotations has been somewhat checked, but still there has been a gradual upward trend. In no case of any importance, however, is an actual recession noted.

The unusual strength of the situation fundamentally is illustrated strikingly in the Chicago market, which has been the recipient of a vast amount of transit stock shipped out hurriedly on account of the high waters in the South. While a great deal of this stock has arrived, there is still some coming and probably some unsold, and while it has affected the actual call for hardwoods to some extent, it has not resulted in a noticeable falling off of hardwood values.

There is still without question an excessive disparity between supply and demand favorable to the producers of hardwood lumber. A large manufacturing concern producing southern stock, which usually carries from 12,000,000 to 14,000,000 feet, reports that it now has only 2,000,000 feet of lumber on its mill yards, and that it has more orders than it could possibly take care of. This, of course, is only one instance, but it is typical.

The feature which probably has more to do with the maintenance of prices than anything else is the fact that sellers of hardwood lumber realize that there is no probability of mills being able to actually meet the demand for some little time. Reports from northern mills are unanimous in the opinion that the shortage of dry stock at most points is almost unprecedented.

In the territory in the South affected by the floods—Arkansas, Louisiana and Mississippi—a great many of the mills have been down for from five weeks to two months, and the Arkansas mills are only now resuming operations. Mills farther south, of course, operated up to a later date than the Arkansas mills, as they got the crest of the flood a week or two after their more northerly competitors. They also have been feeling the situation very acutely for the past week or two, and in a great many cases have been forced to discontinue operations temporarily either because their plants were flooded or because they could not maintain woods operations, or in some cases because it was necessary to utilize the mill crews to fight the floods on the levees.

Probably the worst feature of the situation is seen in connection with the yards in the territory devastated by the floods in the Middle West. In most cases these yards have signified their intention of disposing of the entire amount of their flooded stock before getting in any new lumber. This has to some extent kept them out of the market for a while, but they are pretty well straightened out at this date and are showing a more active interest in offerings.

The manufacturing trade is unusually active for this season of the year, and any disposition on its part to hold off purchases is attributable to seasonable causes in addition to their indisposition to purchase large orders at present quotations. There has, however, been some tendency toward larger buying, which would indicate that they find the call for their product so active that they are forced to keep larger stocks in their yards than they have maintained for some time.

The favorable feature of the whole situation is the excellent weather which has prevailed for the most part throughout all of the middle western states, north and south. This has stimulated building activity very remarkably, and it has unquestionably resulted in a more favorable call for stocks in various woods going into house construction and finish. Favorable weather conditions have also helped the logging and milling situation very materially, enabling hardwood manufacturers to get the most possible benefit out of prevailing high prices.

On the whole, while it is relatively easier to buy stock, both on the part of the wholesale consumer and the lumber wholesaler, neither of these factors is purchasing stock with prices more favorable to themselves than they have been for some little time.

Favorable Showing of Wooden Box Interests

THE TESTIMONY submitted by wooden box manufacturers and allied interests, heard at the second hearing of the now famous Pridham case at Chicago last week and part of this, was concluded on Tuesday of this week, and on the whole the prospects for an adjustment favorable to wooden box manufacturers and hence to lumbermen is anticipated. Realizing the strength of the fiber box people's fight and their favorable position, they being on the defensive, those interested in the wooden box have made every effort to secure the strongest testimony and to present the most convincing arguments possible. Their efforts were unquestionably crowned with decided success.

It was suggested by those competent to judge that Mr. Pridham will perhaps win his case, but that it will really have no bearing on the ultimate adjustment of the tariff on shipments in fiber and wooden boxes. It will be remembered that Mr. Pridham is suing for an equal rate on east bound shipments from Los Angeles on goods shipped in fiber and wooden boxes, he basing his claim on the fact that west bound shipments take equal rates. The case will probably be decided on this point according to attorneys connected, but it is maintained,

and evidently with every justification, that the manufacturers of wooden boxes and box lumber have demonstrated without any doubt that the wooden box is a safer proposition for most shipments, and that the ultimate decision will establish a differential.

The hearing will unquestionably have the effect of raising the standard of manufacture of both the wooden and fiber containers, as it was demonstrated that both classes of packages have not been all that they could be in the matter of strength. This is, of course, vastly more true of the fiber box, and those on the wooden side of the controversy argue that if the fiber people are forced to make a much stronger and better box than they have been they can not compete on the price or rate basis as they have been doing.

The various parties interested are given varying lengths of time to prepare their briefs for submittal to the Interstate Commerce Commission, but it is not likely that any actual decision in the matter will be handed down before fall.

Strong Condemnation of Export Consignments

THE CONSIGNMENT EVIL in the export business has been so often adverted to that it seems like a supererogation to bring up the subject once more, and yet the present time makes a reference most opportune in view of the warnings sent out from the other side that the trade is on the point of experiencing a repetition of the unsettlement and the demoralization which are sure to follow promiscuous shipping of hardwoods and other stocks without a definite idea where they are to be placed or where there is a demand for them. The American exporters of lumber and logs have lost large sums of money in the past because they refused to recognize that they could not throw their surplus stocks on the European markets without congesting them and so depressing prices that they must incur heavy losses. The advances made by foreign brokers seem too great a temptation for many producers and dealers to be resisted, and they apparently lose sight of the fact that they not only suffer damage themselves, but that every parcel of this sort serves to ruin the market for the entire trade. The history of the export lumber trade is punctuated with reports of failures directly attributable to shipping on consignment, and yet there is no lack of imitators who refuse to profit by the misfortunes of those who have gone before and who declined to be warned.

One of the largest of American hardwood exporters in commenting on the question says:

"For years the American lumber press has been endeavoring to impress exporters of hardwoods with the evils of consigning lumber. Consigning hardwood lumber is an evil which seems hard to eradicate. We believe we are safe in making the assertion that ninety-nine per cent of lumber sent to European markets on consignment is sold at a loss, and sometimes at a terrific one. If the loss only stopped with the consigned parcel it would not be quite so disastrous, but every consignment means not only a loss to the shipper of the consigned goods, but lower values to the legitimate shipper of the same goods, who does business."

The pertinence of the subject is shown by an editorial in the issue of The London Timber Trades Journal of April 12, which reads as follows:

"Hardwood conditions are very little changed since our last issue, except that business is on a better footing, because orders are coming along more freely, and forward buying is conducted on a wider basis than hitherto. Nevertheless, in this connection there is much room for improvement, but we fear a better state of things cannot be arrived at until shippers as a body realize their responsibilities. For instance, a section of them—and we are glad to note it is by far the largest section—are ruled in their business operations by market conditions and cost of production. These are quite content to do business on legitimate lines—that is to say, ship goods against contract. The smaller section, who take great pleasure and delight, irrespective of profit, in sending consignment parcels, certainly do not recognize the duties they owe to their fellow-shippers and themselves. Such firms appear to send consignment parcels on the 'random' system, which, in a few words, simply means their own financial necessities. For quite a long time past the trade in the West coast ports has been fairly free from the curse of consignments, and our remarks under this heading are now penned with the object of warning such shippers against a repetition of this evil. It is not at present with us, but has every appearance of coming along, judging from a few stray consignments which have come to hand recently. It is a pity there is no effective resistance available on this side to deal with such operations, which are good neither for shippers nor importers."

Moonlight on Lake Michigan.

THE COVER PICTURE illustrating this number of HARDWOOD RECORD represents the photographer's best effort to reproduce the effect of moonlight on still water. There is neither land nor sail to break the monotony of the scene, and the picture consists wholly of plain black and clear white; yet the artistic requirements of good photography are met. Only those who have attempted to reproduce moonlight scenes by means of the camera can appreciate the difficulty of doing it well. There are as many varieties and grades of moonlight as there are viewpoints. What, for instance, would the accompanying picture look like if the artist had pointed his camera in any other direction than squarely toward the moon? It would not have been a moonlight scene at all. What really happens in most cases in making a photograph like the present one is that two or more pictures are combined. One may represent the water, the other all that appears above the horizon. The two are rephotographed for the complete picture. There are other ways of doing it, and each artist follows the method which gives him best results.

The scene represents a summer night on Lake Michigan. The calmness of the water shows that the air is still; but the peculiar appearance of the clouds partly surrounding the moon suggests that a thunderstorm may be only a few hours away.

The five Great Lakes are connected by straits and rivers, and taken together they constitute the largest body of fresh water in the world. In fact, they are nearly as large as all other fresh lakes in the world combined; and they carry more commerce than all others combined. The passenger traffic also is very great. A chart of routes of travel, connecting the hundreds of harbors and landings scattered from Buffalo to Duluth and Chicago, looks like a series of spider webs, radiating from scores of centers and running everywhere.

The scenery on the Great Lakes ranges from the busy city wharf to the wild, uninhabited shore where cliffs form the skyline. It is supposed that the basins forming the beds of the lakes were executed by glaciers which pushed down from Canada and melted between the present southern shores of the lakes and the Ohio river. The ice crossed the Ohio river in the vicinity of Cincinnati and penetrated Kentucky. Peculiar red pebbles, torn from rocks in Canada, now show the limit of the old ice sheet's southern advance. For hundreds of miles along the northern shores of the lakes the bared and scratched sheets of solid rock show the grinding work of the ice which passed over them.

Available Foreign Hardwoods

AN ARTICLE IN THIS ISSUE of HARDWOOD RECORD concerning some of most valuable timbers of Mexico and Central America, contains information of much value. The writer of the article is well posted on the subject and what he says may be accepted as authoritative, as far as details are given. Reliable information in regard to the timber resources in the countries south of the United States has heretofore been hard to procure. Few surveys and cruises have been made by competent engineers in the employ of the different governments. Most of what is known of the forest resources in much of the region was obtained by timber merchants, scientific expeditions, and travelers. Erroneous opinions have prevailed, some persons holding that the forest resources were enormous, others contending that little could be expected from the tropical woods south of us. There is no doubt that many users of hardwoods in the United States are looking to Mexico, Central, and South America for supplies in the not distant future. The

lack of information has been felt. What a few large operators have learned from representatives sent into those regions, has not been made public. However, the real situation is gradually becoming known, and in course of time the general users of wood in this country will be in a position to figure intelligently on the forest resources of the countries of tropical America.

The Sundry Civil Bill Again

THE PROBABLE PASSAGE of the Sundry Civil Appropriation Bill at Washington, embodying the obnoxious provision which caused its veto by ex-President Taft, is causing considerable comment all over the country and in very few instances is this comment favorable. The provision specifies that no part of the appropriation shall be used for the prosecution of labor unions and farmers' organizations violating the Sherman anti-trust law. The bill has passed the House and Senate and it is surely to be hoped that sufficient pressure will be brought to bear upon President Wilson to compel him to see the injustice of this provision as it will affect employers. President Wilson argues that the amendment to the bill is not in effect guarantee that the unions and farmers' organizations will not be prosecuted for violation of the law, but maintains that specific provision will be made for such prosecution at a subsequent time. Nevertheless it is difficult to conceive of the necessity for such a course; in fact, the most significant part of the controversy is the very fact that the most prominent manufacturers in the country have voiced their decided protest against the passage of the bill with this amendment, which would surely indicate that in their opinion and in the opinion of their legal aid the provision is a real danger.

All He Asked Was a Little More Time

THREE TRAVELING COMPANIONS, Gray, Brown, and Green, were breakfasting at a hotel in the South. Gray ordered coffee, rolls, creamed potatoes, bacon, and fried eggs. Brown told the waiter he might duplicate the order for him; and Green said: "You may bring me the same, all but the eggs—you may eliminate the eggs." In due time the waiter appeared with the breakfasts of Gray and Brown, which he served; then, stepping around to Green, he said in a conciliatory voice: "We got fried eggs, an' poached eggs, an' boiled eggs, an' scrambled eggs, an' om'let, sah, but we ain't go no 'liminated eggs." "Well," said Green, "my doctor says my eggs must be eliminated. Have it done at once, and hurry up my breakfast." Presently the waiter was back again, but without the breakfast. "The cook says tell you, sah," he said, "he jes' can't 'liminate no eggs dis mawnin." "Now, see here," said Green, in apparent anger, "I never before was at a hotel where I could not have my eggs eliminated. Go tell the cook that, and tell him to eliminate those eggs double sudden, or I shall complain to the manager." Away went the waiter, but returned almost immediately, followed by the cook. "I come to 'splain to you myse'f 'bout dem eggs, sah," said the excited chef. "I ain't been here on'y a week, an' I don' wan' to lose my job, an' dis is de ve'y fi'st ordah I had foh 'lim'nated eggs since I come. I was goin' to 'lim'nate 'em right off, but when I looked round for de 'lim'nater, dey ain't got none. Co'se I can't 'lim'nate eggs 'thout a 'lim'nater, but I's goin' to have the boss git one this ve'y day, an' if you'll 'scuse me this mawnin', nex' time you come I'll suah 'lim'nate yo' eggs better'n yo've evah had 'em 'lim'nated befo'!"

Green wanted "'lim'nated" eggs because his doctor said that ordinary eggs were not good for his health. In diagnosing the case of the hardwood trade it would appear that undue price inflation might result in fatty degeneration of demand or some other startling complication inimical to the best interests of that apparently healthy patient.

The New Thought

BUSINESS MEN ARE VARIOUSLY ACCUSED of being purely cold-blooded in their attitude toward those less fortune in their business ventures. This belief is perhaps warranted to a certain extent, as it is merely natural that the fittest who survive should not show undue compassion for those who have not found the way to business success. But that the American business man is an absolutely cold-blooded individual is disproved in many instances. One of the most recent and most striking of these has particular bearing upon the lumber business.

A prominent Chicago lumberman, John C. Spry, is responsible for the inauguration of an idea which is highly meritorious. Mr. Spry in a letter suggests that there are many men connected with the lumber business who sooner or later come to want, and he deplores the fact that there is no provision for taking care of those disabled through sickness or old age. Mr. Spry takes a very enlightened view of the relation between employer and employe, maintaining that if through misfortune a man is not receiving a competency, business at large has nevertheless prospered partly through his service, as each individual is a unit in business.

The main idea of the suggestion is that several homes be established in this country at different points, which shall not be considered charitable institutions, but shall offer facilities for the benefit of those formerly connected with the lumber business, but rendered incapable of maintaining themselves. Mr. Spry's idea that a motion should be put on foot to establish such a system of homes certainly merits the earnest consideration of the lumber trade in all parts of the country. It can well be seen that the lumber trade could afford to maintain such refuges when it is considered that it is the third largest industry in the country and when the enormousness of the aggregate capital engaged is considered.

Record Price for Oak

WHAT IS SAID TO BE THE HIGHEST PRICE ever paid for oak timber was recently obtained by the owner of a tract in the forests of High Spessart, Bavaria. The contents of the trunks were calculated and the logs were sold by the cubic foot. The best timber brought an equivalent of $830 a thousand feet, board measure. The best log sold at the rate of $900 a thousand feet. The timber was bought for a veneer mill which will market the veneers in England and other European countries. Some of the cheaper grades of oak put on the market at the sale were purchased for barrel staves.

These facts should surely carry weight with those propagandists who advocate immediate, intensive forestry in this country on a nation-wide scale without considering its feasibility from a business point of view. It is merely a simple problem in proportion: Value of forest products abroad is to value of forest products here as intensity of forestry application abroad is to x, the unknown being the feasible intensity of forestry work in this country under present conditions and market values.

Who Is the Guilty Party?

A RECENT ISSUE of a prominent vehicle journal contains an article by a German purported to be well versed in all questions pertaining to lumber and its production in all parts of the world. This gentleman recently made an extended trip to various lumber producing sections in this country and his observations, as expressed in the article, rather raise a doubt as to whether or not he confined his observations mainly to the "coffee-pot" mills which can still be found in remote sections of the country, or whether he is merely laboring under a misapprehension as to what he saw. The article opens with a knock for the wasteful methods employed by American lumber manufacturers. It is conceded by lumber manufacturers themselves that their methods are not above criticism in the matter of utilizing the greatest possible percentage of their timber; but the writer makes a further observation that the American manufacturer's logs are literally chewed up and then says that when a lot of one-inch boards that run seven-eighths inch at one end and an inch and a quarter at the other, with proportionately the same amount of differences between the edges of the boards, have been rejected by the dealers often enough they are loaded in a schooner and sent to South American ports or elsewhere as far away as possible, where they cannot be returned. It is scarcely believable

that an intelligent observer of American sawmilling could sincerely make such a statement. It is true, of course, that lumber production as carried on in this country aims mainly at quantity of production; but it is certainly not a fact that quality is slighted entirely for quantity. In fact, in present modern operations that mill is indeed rare which turns out a quality of lumber which even remotely resembles the description which this German observer gives. Modern sawmills, when properly installed, are famous for their accuracy. It would not, of course, pay to saw lumber in this country on the scale on which it is manufactured by German mills; but the mere fact that American manufacturers turn out lumber in quantities does not mean that the quality of their stock merits the rather foolish statement contained in the article referred to.

Shall We Worry?

ONE READS IN THE DAILY PRESS and in the various periodical magazines which are published for the benefit of the American public of so much scandal in connection with the administration of the laws and various affairs of our government that he unconsciously comes to believe that we are going to the bow-wows. Occasionally the reader of these sensational reports will take time to read of the good features of our form of government and of our people as a nation and he either immediately acquires an unduly inflated head, because he is an American, or he views such articles with scepticism. However, an editorial in the last issue of the Nation's Business demonstrates that we really have just grounds for thinking that our own little country is about as good as the rest of them. The editorial, however, voices a warning that we should not rest on our oars, but that the future development of the country will require an even greater and much more varied effort than we have had to exert heretofore. The editorial in part is as follows:—

"Only three countries in the world, China, with a population of 350,000,000, India with 295,000,000, and Russia with 140,000,000, have a greater population than the United States. The last estimate of the treasury places the population of the United States at 96,000,000.

This great nation has grown up within two lifetimes. There is a man living in Washington, D. C. at the present time, ninety-eight years of age, whose father fought at the battle of Bunker Hill. That battle preceded the existence of America as a nation. Henry Gassaway Davis when a tiny child was present at the laying of the first tie of the Baltimore & Ohio Railroad. The chief participant in the actual laying was Charles Carroll of Carrollton, who had signed the Declaration of Independence. Here are two instances in which two lives have covered the history of our nation.

"Our growth has been due to matchless resources, stored by nature in the American continent, and awaiting the power of man for their transformation into results. The greatness of America therefore is accounted for by the accidents of location and opportunity. We can not claim that the results so far secured in the expansion of business have been due in any large measure to scientific or thorough use of resources and opportunities. The twentieth century has brought us face to face with the fact that many of our resources are in danger of exhaustion; therefore the thought of today is strongly directed not merely toward efficiency in securing raw resources from the soil, but also efficiency in manufacturing and in marketing both at home and abroad. It is this effort toward efficiency that accounts for the rapid manufacturing development of the past few years and the increasing export trade."

No Wood Indestructible

A RECENT BULLETIN issued by the government, describing greenheart timber, has been misinterpreted by a number of writers who have published comments on this South American wood. It is called the "indestructible," "eternal," and the "everlasting" timber. The government publication made no such claims for it, and the facts warrant nothing of the kind. No wood is indestructible, and none will last forever. As much as can be claimed for any timber is that it will give long service, and the length of that service depends upon circumstances. Any wood —and any material—will wear out if subjected to friction, and if there is any wood absolutely immune to decay, when subjected to conditions favorable to decay, it has not yet been discovered.

Greenheart is hard, heavy, strong and resists decay admirably, and that is as much as can be claimed for it. The same is true of black locust and Osage orange, and if they could be had in large timbers and in sufficient quantity, they would probably measure up to greenheart. It is its large size as much as anything else which has recently brought greenheart to notice, for it has been known for hundreds of years without attracting special attention. The gates of the Panama canal are being built of this timber, and since very large pieces were demanded, greenheart seemed to be the only very strong and durable wood that would answer. It was tried in similar construction in England many years ago, and shipbuilders have long been acquainted with its good qualities.

Thoroughly dry greenheart will sink in water, and a number of other tropical woods will do the same, among such being mangrove and lignum-vitæ, which grow in Florida. It is mentioned as of great importance that "logs of greenheart which have remained under water for one hundred years have kept in perfectly sound condition." That is nothing remarkable. Logs of any wood kept under water will remain sound for a hundred years, or even a thousand years. Decay in wood can take place only in the presence of air. White cedar logs in New Jersey and cypress in Louisiana have been taken in a perfectly sound condition from deep under water where they had lain many hundred years. That is no test of wood's durability. If it were, some of the Alaskan firs would beat them all, for sound wood has been taken from coal veins near Cook's Inlet, which was certainly more than a hundred thousand years old.

Hardwood Becoming Constantly More Popular

ONE OF THE NOTICEABLE TENDENCIES of the times in connection with modern building construction is shown in an increased use of hardwoods due, no doubt, to a full appreciation on the part of the building public of the advantages in durability and attractiveness which can be secured through the use of hardwood in various parts of building construction. The time is not very long past when hardwood even for floors was not in general use. Gradually more pretentious residences were fitted with hardwood floors and the style became so decidedly popular that no residence with any claims to pretense or modernness has anything but hardwoods in its floors.

With present improved appliances for manufacture, the hardwood door has become an important factor in the finish of the up-to-date residence and office building. In fact, fine hardwood doors and finish throughout the residence add much to its desirability, not only from the investment standpoint but also from that of those people who are to make it their home. Speculative builders and real estate men have learned this lesson to such an extent that the houses which they erect are invariably finished with hardwood doors and trim. Such a house is always much more salable, and as a security for loans is much more favorably considered.

The carpenter, contractor and builder hold the pivotal position in the building world midway between the manufacturer of building materials and the consumer. With their expert knowledge of methods and material, their advice and opinion is sought by those who contemplate building, and it often happens that a word from a practical builder or architect will carry far more weight than a mass of brilliantly illustrated catalogues and circulars.

What is needed is a broad campaign of education toward better building, one that will influence all building construction in such a way that everyone, even in the remotest section, will realize the economy in the use of hardwood doors and finish throughout.

Pert, Pertinent and Impertinent

When the Green Gits Back in the Trees

In Spring, when the green gits back in the trees,
  And the sun comes out and *stays*,
And yer boots pulls on with a good tight squeeze,
  And you think of yer bare-foot days;
When you *ort* to work and you want to *not*,
  And you and yer wife agrees
It's time to spade up the garden-lot,
  When the green gits back in the trees
    Well! work is the least o' *my* idees
    When the green, you know, gits back in
      the trees!

When the green gits back in the trees, and bees
  Is a-buzzin' aroun' ag'in
In that kind of a lazy go-as-you-please
  Old gait they bum roun' in;
When the groun's all bald whare the hay rick
    stood,
  And the crick's riz, and the breeze
Coaxes the bloom in the old dogwood,
  And the green gits back in the trees,—
    I like, as I say, in sich scenes as these,
    The time when the green gits back in the
      trees!

When the whole tail-feathers o' Wintertime
  Is all pulled out and gone!
And the sap it thaws and begins to climb,
  And the swet it starts out on
A feller's forred, a-gittin' down
  At the old spring on his knees—
I kindo' like jest a-loaferin' roun'
  When the green gits back in the trees—
    Jest a-potterin' roun' as I—durn—please—
    When the green, you know, gits back in
      the trees!

—*James Whitcomb Riley.*

THE FISHING FEVER



The Dreamer: "The lumber business makes me sick."

An Even Break

Mr. Jinks: You've spent fourteen mortal hours and $35, and what have you got to show for it? One hat worth about $3.50.

Mrs. Jinks: True. And last week you spent five days and $118, and what have you got to show for it? One fish story about a big trout that got away and an awful cold in your head.—*Country Gentleman.*

Utilizing Waste

An Irishman was newly employed in a lumber office. The proprietors of the company were young men and decided to have some fun with the new Irish hand. Patrick was duly left in charge of the office, with instructions to take all orders which might come in during their absence. Going to a nearby drug store, they proceeded to call up the lumber company's office, and the following conversation ensued:

"Hello! Is this the East Side Lumber Company?"

"Yes, sir; and what would ye be havin'?"

"Take an order, will you?"

"Sure—that's what I'm here for."

"Please send us up 1,000 knotholes."

"What's that?"

"One thousand knot holes."

"Well, now, an' ain't that a bloomin' shame? I'm sorry, but we are just out."

"How's that?"

"Just sold them all to the new brewery."

"To the new brewery? What do they want with them?"

"By golly, an' they use them for bunghole in barrels."

Wisdom

"Every man ought to save up enough to buy himself a good big farm," said the thrifty citizen.

"Yes," replied Farmer Corntossel; "and then do something else with the money."—*Washington Star.*

Profitable Lumber Advertising

POINTS ABOUT WRITING COPY

Editor's Note

This is the third of a series of articles on "Profitable Lumber Advertising," the first being a general article on the subject, and the second on "Writing Copy." The fourth, on the subject of "Borders, Headings, Types and Layouts," will appear in the next issue.

Having considered the first principles of copy writing, we will devote a few moments to some principles that must be taken into consideration.

Lumber is a peculiar commodity. There are so many different freight rates that to quote a price in an advertisement in a paper of national circulation and written to consumers, is poor policy; in fact, it won't work at all. You haven't the room to quote a lot of different prices for different rates and even if you did, it would make the advertisement all out of "balance" and unattractive. You can't quote a price f. o. b. mill because nine-tenths of the consumers don't know how to figure freights and haven't the time to look them up. It would probably work if the advertisement were addressed to wholesalers only, because they know how to figure freights. If the mill is anywhere near a big centre and taking the same rates to all points as the big centre, it would then be possible to quote. The writer knows for a fact, however, that it is best not to quote a price even in the latter case; first, because you will get the names of all the interested parties in answer to your advertisement by their inquiring letters, and, second, because a "check" can be kept on the mediums or papers that are used and therefore you are able to tell which paper or papers are producing inquiries at the lowest cost. It is not to be supposed that a one-time insertion of your copy will always bring results. There is everything in repetition—a man who sees your advertisement constantly begins to get faith in you and your products—the seeing of your advertisement there continually inspires his confidence in your house and what you have to sell.

The writer, in planning out his second advertising campaign, found that in general a high price is a good selling point when it is backed by exceptionally good lumber or good value—one sort of reinforces the other and is generally convincing. Whenever you advertise a car of lumber at a cheap price, tell why you are willing to sell it at that price. There's a reason for everything and in this case there is some reason why you are willing to sell it close. Naturally a man is suspicious of a cheap price and "wants to know." If it does nothing else, it creates confidence to tell "why."

If you have a large space in the papers and only one item to advertise, you can tell a story about that one item and make it just as interesting reading as any news item. When you have several cars or a block or so of stock to offer, it is well to break up the reading matter of a large space under separate subheads or paragraphs and write each panel separately. Then group it all in an attractive border with an interest-compelling heading. This, however, is really more on the order of department store work, but it can be done successfully in advertising lumber.

Short sentences are preferable to long ones—they are more convincing because they are stronger. Compare, for instance, "We would be glad to have you investigate our methods" with "Investigate us!" They are more forceful.

Don't use high-sounding words—simple, direct words only. Remember, you're dealing with men of ordinary education. Don't make extravagant claims—they have no effect on the people of today. You know the general claims that were made formerly—"Best in the World," "Special Value," "Exceptional stock," etc. In this age you must deal in specific facts and then back them up.

Now as to the heading,—there are several varieties and each serves its purpose. The first is the simple heading, such as "Plain White Oak." This is merely a title heading and it is all right for a dignified advertisement in a large space. Then, the declarative heading, "Buy Plain White Oak Now." This kind of heading must be backed up by good forceful copy. The interrogative heading, "Do You Need Plain Oak?" is good in its way—it is the same as a man stepping up to you and asking a question; you naturally think and answer. When such a heading appears in an advertisement, you naturally read a little farther to find out what more the writer of that advertisement has to say about it. The interrogative heading is not used as much as it could be. Then the heading of suggestion, "Plain White Oak for Furniture Manufacturers." This draws a certain class of trade to the attention of what the copy has to say.

The heading is one of the most important features in the proper writing of an advertisement. It is especially true in the case of the man with but small space where the advertisement will be surrounded with other larger advertisements. It will thus catch the eye if the heading is strong, and will induce the reader to peruse it throughout. It is a great trick to write a good heading, and there have been but few men in the advertising game who have done it properly.

When you can take two men to look at a pile of lumber, tell them all about it, and then ask them to write a description of it, you'll be surprised at the result. One man will probably write a very vivid description and the other will write a few plain lines absolutely devoid of any realism. A realistic description of a car of lumber can be made so interesting that a reader glancing at the beginning feels compelled to read it throughout and then to write the advertiser. It only takes a little imagination—just write it as you would deliver a red-hot selling talk about this car to the buyer who said he was not impressed with your stock. Just put a little enthusiasm into the words of your advertisement. But a word of caution here; don't let your enthusiasm run away with you so that you have a temptation to "stretch" your selling points; truthfulness should ever be your slogan. In appealing to men the chief factors to be considered are the appeal to reason and absolute honesty. There you have the rule necessary to advertising success.

Timeliness is another great point to be considered. Did you see the advertisement that appeared in most of the lumber trade papers, of the little crowd of lumbermen who are located on the Ohio river? It appeared just after the recent flood had commenced to go down and the heading of the advertisement was, "Never Touched Us," and went on to tell about the flood having passed them and that their stocks of oak, poplar, etc., were untouched, etc., etc. Well, that's timeliness!

Strive for originality. Today you can take up any lumber trade paper, select two lumber advertisements and just change the signatures around and no one would know the difference, except perhaps the owners of the advertisements themselves. Most any of the copy that is run in advertisements can be changed around in any lumber paper and yet read all right.

A great many narrow-minded people object to the use of slang in either advertisements or letters. The over-use of it is bad, but in general, slang is very efficient, because it adds the personal tone to it, for which we all strive. The personal tone can be likened to the personal contact between the buyer and seller. When Thomas Lawson writes an advertisement and wants to drive home a special point, he says, "Peg this fact?" It's short, it's original, it's "slangy," but it "gets there." In other words, you make a note of that fact because it's driven home to you. It's just as if Thomas Lawson were standing in front of you and saying it directly to you. That's the personal touch. One good way to prove the strength of your copy is to write it and place it away for a day—

just forget it. Suppose the copy is to interest a trim manufacturer. Next day, get out that advertisement, imagine that you are a trim manufacturer, and think of the special requirements of lumber that you have to use in your work. Now read the advertisement. Does it appeal to you? This is a splendid test for the strength of your copy—you can thus pick the weak spots in it and change them to add to the strong ones.

Sequence of ideas—a word about that. It is only natural, when we describe a car of lumber, to mention the amount, thickness, grade, kind, describing the stock for widths, lengths, dryness, texture, price, etc. That is the meaning of the term—sequence of ideas. They are all in order as above, and are in their natural order. If you mix them all up, you go from one thing that has no bearing on the other, and the connection is difficult to get. When this is the case, your copy becomes weak. It's just like a salesman coming into your office, mentioning the thickness and amount of stock, then the kind, and then making some remark about the weather, then telling about the texture and making some other remark foreign to the conversation. It works out the same in every case,—so just keep your mind on the subject and write the advertisement in logical order. When you have no special lot of stock to offer, but all thicknesses, for instance, and you want to deal only with the character and texture of the lumber, just go about it in a natural way—the same as you would talk about it to one of your customers. Then work it up from that, bringing in as many points as possible but following out the ideas enumerated above.

A lumber manufacturer who, becoming quite interested in advertising, recently asked the writer, after seeing the results of the latter's sales-letters, the records of which are kept on "Check-sheets," to tell his method of writing. That question has been answered before, and the method is simple. First, know all about your goods and their value—know this thoroughly. Second, "talk" your letter, imagining that your stenographer is the buyer you are addressing and that you are trying to sell the latter this car of lumber. In connection with this matter, there is one important point that should not be overlooked. Never use the pronoun "I" unless you are on intimate terms with the buyer you are addressing, or unless you are a "one-man" concern with no "company" on the end of the title. "We" is always correct and sounds business-like—it also carries more weight with it than I. The use of "I" in the case of a big concern doesn't look good—it seems to the reader of the letter that there is something wrong with the organization, and there are likely to be a bunch of "I's" in the concern, which is detrimental. It's like when you hear a salesman speak of a concern as "they, it or them;" you know right away that something is wrong somewhere—they either are mean in their ways or their organization is poor. Any man who speaks of it as "we can do this," "we can furnish," has a good organization which treats everyone fair, and you can rest assured of fair treatment and good goods. The concern in the first illustration won't last long—it is as one of the writer's friends says, "Slated for the rocks."

When you have a standard product—that is, if you make only poplar, for instance,—it is well to run advertisements in series dealing with but one or two selling points each time the advertisement appears. This will keep you hustling for new selling points. Put it up to your salesmen; have a prize offer, a small one like a box of cigars, for three good selling points. Let one of your customers be the judge—just ask him off hand. That will get all the "boys" interested in the work and you'll be surprised at the interest they will take and how much closer it will "knit you" all together. For an example, a Milwaukee concern some time ago put out a series of advertisements about their "Steel Polished Perfection Maple Flooring." Each advertisement showed one of the pictures of the making of the floor, and the pictures as a series showed the whole process from the cutting down of the trees (showing the axeman) to the laying of a floor by the carpenters. Each man in the advertisement "talked" his part of the work to you and each advertisement represented mighty strong copy. The writer of that series of advertisements knew that it would be impossible to embrace in one advertisement all the selling points of that flooring. He knew also that, even if he did use a big space, people would tire of reading it before they were half through. So this scheme was hit on and a man naturally looked for these ads whenever the paper appeared. It is a great mistake to try to put a whole lot of selling points in one advertisement. Readers take quickly to a series of advertisements and get to look for them. When you get them interested in this way, you couldn't want anything better. You've gone a long way, in fact, toward making them customers.

Gravity Lumber Conveyors

The inquiry B 440 in the April 25 issue of HARDWOOD RECORD which asked for information about labor-saving devices, making inquiry for a ball-bearing runway that will carry boards for 100 feet with a simple push, brings up again the question of gravity conveyors for lumber which has been discussed in these columns in the past, but perhaps not given as much attention as it deserves.

There are some gravity, ball-bearing conveyors in use—one set at least that the writer has seen in the lumber yard of a hardwood flooring company at Louisville. These are simply small ball-bearing rollers carefully mounted in angle-bar steel frames made up in sections ten or twelve feet long so that they can be hooked together and extended to whatever distance is desired and in whatever direction. A row of these sections strung out will serve the very purpose the inquirer asked about, that is, they are so light running that they will carry a board one hundred feet easily with a little push, or a slight slant will carry a board with its own weight from the car where it is being unloaded to any place in the yard. These carriers were developed right in the yard of the flooring company in mind, and were made under the instruction by the Alvey Ferguson Company of Louisville and the Dow Iron & Wire Works of the same place. They are simply modifications of some forms of fairly well-known gravity conveyors. The Alvey Ferguson Company, for example, has a patent roller conveyor with concave rollers, that is, the rollers are smaller in diameter at the center than at the ends, which is the patented feature. Usually the rollers in this conveyor are set close together for the purpose of carrying boards in the warehouse. There is another type of conveyor on somewhat the same order except that it uses straight-face rollers made of metal instead of wood and placed very close together. This is the Matthews gravity carrier, made by the Matthews Gravity Carrier Company, Ellwood City, Pa. It is extensively used for conveying brick by gravity from kilns to loading points and it is made in sections so it can be put up and taken down and extended in any direction.

The lumber gravity conveyor has fewer rolls in it, they being placed at something like two feet apart and being sixteen or eighteen inches long. The exact distance apart or the exact length is not a very important matter and may be varied to suit the ideas of different people. There are certain things about the construction, however, that must have very careful attention to give satisfaction. In the case referred to above the angle-bar steel frames are very thoroughly braced, so that they will retain their shape, and the rollers are very carefully mounted and are kept perfectly square with the frame. This is the important part in a conveyor of this kind. If one or two of the rolls are the least bit out of square they will have the effect of carrying the lumber to one side so that it will fall off before going a great distance on such a runway. Given rolls carefully aligned, however, and frames so thoroughly braced that they will hold their alignment, will carry lumber from one hundred feet to one hundred yards without it tumbling off.

These are labor-savers where their use is practical, and where the lumber is to be moved in a straight line with a slight incline or down grade. It is not practical to turn corners with a conveyor of this kind as with a brick conveyor or other conveyor handling short stock. The stock must move in a straight line, but just a little incline will carry lumber a great distance, or even placed level, one can, by giving a board a slight push, send it one hundred feet or more.

Leaf-Seasoning Timber

Green timber contains such a large amount of water that in a great many cases it is impossible to float logs without allowing them to dry out somewhat. This isn't important when logs are hauled to mill but when they are to be driven or floated it means a great deal. Leaving the logs in the woods or along the river bank for a considerable time to season during the hot months is usually poor policy because of the danger from sap-stain and from too serious checking.

Partially seasoning standing timber by girdling is an old practice with a few important species, particularly cypress in America and teak in India. In the cypress forests of the South the trees are usually girdled in early winter and if the sapwood is cut through, the loss of water from the leaves will tend to dry out the trunk. The leaves may, in a crude way, be compared to so many little pumps which are slowly pumping the water out of the stem into the branches and out into the air. When the trees are cut the summer following girdling, a sufficient amount of water has been given off so that in a majority of cases the logs can be floated.

Teak, which is one of the most useful timbers in the world, is not felled green but is completely girdled and allowed to season in the tree. Dr. Brandis, an authority on Indian timbers, says: "Timber well girdled dries completely and seasons evenly, for it is on all sides freely exposed to sun and wind. Smaller trees dry sufficiently if left standing for one or two years after girdling; larger trees must stand longer. When a teak tree is felled green, that side of the trunk which is in contact with the ground takes a long time to dry, the timber seasons unevenly, it is less useful and less durable, and when thrown into the water it does not float readily."

Another authority recommends that the dense Australian timbers should, like teak, be ringed while standing. "This should be done a year or more before felling, and between April and August, when the sap is quiescent. The tree is most thoroughly drained of its sap when thus left vertical. This process has, however, been objected to because it causes or intensifies heart-shake, and, by drying the wood too rapidly, renders it brittle and inelastic."

This method of seasoning standing timber has also been tried to some extent with our tupelo gum, but has not been successful, since it is difficult to girdle them deep enough to prevent the sap from rising.

In cutting paper birch in this country it is the common practice to bolt and haul it. A marked variation from the usual method of operation is in the few cases where the logs are driven or rafted to the mill. When this is done the logs are never cut into bolts in the woods, but the whole stem is put into the water. Contrary to common belief, green paper birch will float for a while, and it is sometimes put into the water in this condition. But, since seasoned wood is lighter, it is usually first seasoned to some extent. An effective method is to cut the trees in summer and leave the tops on. The leaves continue to transpire moisture for a while, with the result that a large quantity is removed from the tree at once and the wood is left in a comparatively seasoned condition. The tops may then be cut off and the stem put into the water immediately. Another method is to remove the tops at once and then let the logs stay in the woods for about a year to season. This method is probably not so effective, since birch seasons very slowly when left with the bark on. If cut in summer the logs are also likely to stain badly, at least at the ends.

The red gum is a tree in which the drying out of the trunk by means of the leaves offers particularly favorable conditions. It was noted that when a green tree is cut down the leaves remain stiff and unwilted for many days, and this even in the hottest weather in June and July. The explanation of this, according to Dr. Von Schrenck, is as follows: "When a tree is cut down the evaporation of water from the leaves will continue for a time, the duration of this evaporation depending upon the amount of water in the leaves. In most broad-leaved trees, owing to the fact that water evaporates from both the upper and lower surfaces, the leaves dry very soon after the tree is cut down. The rate at which water can pass from the smaller branches to the leaf petiole and thence to the leaf is very much slower than the rate at which the water evaporates from the leaf surfaces. As a result the leaves soon drop and dry up. In the red gum, however, only one of the surfaces of the leaf, the lower, is provided with stomates so that the evaporation of water takes place only from one surface and that the most protected one. The rate at which water passes from the trunk to the branches and thence in time to the smaller branches, leaf petioles, and the leaves is evidently very nearly the same as that at which the water evaporates from the leaf surface. For this reason the leaves remain green and turgid for a comparatively long time."

In order to determine whether there was any practical result to be obtained by giving the leaves an opportunity to remove as much water as they could, some experiments were conducted by the United States Bureau of Plant Industry. About twenty-five trees were cut down in August, and instead of sawing the timber into logs immediately after felling them they were left intact until the leaves had become absolutely shriveled and dry. This took some two weeks or more. After that the trunks were cut into logs. These logs were skidded to the river just as other logs were skidded. One or more rolled down the bank, and instead of sinking, as a red gum log usually would after but two weeks' seasoning, these logs floated, though not very high out of the water. The leaf-seasoned logs were made into a separate raft and were brought to the sawmill.

After they were sawed a number of boards were taken at random from the leaf-seasoned logs and a similar number from ordinarily seasoned logs. These were carefully measured and weighed, care being taken to separate sap and heart boards. The average weight per cubic foot of the leaf-seasoned sapwood lumber was 57.7 pounds against 68 pounds for that ordinarily seasoned; for heartwood the weights were 50 pounds, leaf-seasoned, against 61.6 pounds, ordinarily seasoned. In other words, the boards from leaf-seasoned logs were much lighter than those from logs seasoned in the ordinary manner. Both sapwood and heartwood of the leaf-seasoned logs were lighter than water (62.36 pounds per cubic foot) which means they would float while in the other case a log containing sapwood would sink.

In commenting on the results the investigator said: "While the experiment is but a crude one, the results obtained therefrom are believed to be absolutely trustworthy. The testimony of experienced millmen who floated the leaf-seasoned logs bears out the evidence shown in the table. It may be objected that it will be an expensive matter to saw down trees and leave them to dry, and then to go back several weeks later to cut off the branches. While this is certainly true, the expense may be justifiable if one can reduce the time of holding the logs on the river bank and thereby reduce the chances of fungous attack."

Up to the present time cedar has been the principal crosstie wood of Michigan, but a decided change to treated hardwood is now in progress. Recently the Michigan Central began to treat hardwood ties at Toledo, O. The Grand Rapids & Indiana has contracted for a large number of hardwood ties which will be treated at a plant to be built at Reed City, Mich., this summer. The Pere Marquette is also planning to use treated hardwoods, showing that the change of policy is general throughout the state. Beech is the chief wood employed.



Marketing the Short Lengths



It is too bad that in the economy of nature all the trees didn't grow so as to produce nothing but firsts and seconds, 14 and 16 feet long. Unfortunately, however, timber is imperfect, like man; there are knots and shakes and other defects, and there are stunted little trees that weren't intended to produce extra long lumber; while not even the greatest mathematician could squeeze long boards out of all the parts of the tree.

Consequently the lumberman who is confronted with the task of selling the product of the mill, and finds that he must dispose of a good many boards that are regrettably short, compared with the lengths which the consuming manufacturer declares that he must have, necessarily has to give a good deal of thought to the problem of finding a satisfactory outlet for them.

He may do one of two things: either sell his lumber just as it runs, with the buyer taking a chance on the length question, or pick out the long stuff and sell it at a premium to the man who insists that he must have it, at the same time accumulating left-overs of short stuff which must be disposed of. While a lot of lumber is sold, especially to furniture manufacturers and others who can use a great variety of cuttings, without a great deal of emphasis on lengths, the widths constituting the main question, interior finish manufacturers are the ones who keep after the lumbermen about lengths.

Most of them either buy with a guarantee as to length, with say 33⅓ per cent 14′ and 16′ or, what amounts to the same thing, exact a statement from the seller that the lumber will contain a satisfactory amount of long. So in the end it amounts to making sure of giving the interior finish man a big percentage of long stuff, either directly, by making a charge for it, or indirectly, in order to hold his business.

Selling the long lumber is comparatively easy, the main question being one of getting the price. If consumers can be found—and they are to be located without much difficulty—who will pay a good stiff premium for their long lumber, it doubtless pays the lumberman to lay out those dimensions for that particular trade, though of course he then has left on his hands a lot of short stuff, which must be sold as short without the redeeming feature of a few thousand feet of long to color it up.

Most consumers believe that the premium they are asked to pay for long, that is, the difference between the price of run-of-pile stuff and extra lengths, is ample to cover the difference in value. On the other hand, the lumberman who sees only this premium, without realizing that he has destroyed much of the salability of his stock, is likely to make the mistake of thinking that he has made good money on the sale, whether he succeeds in moving the remainder promptly at a fair price or not. And there's the rub. If the short stuff sticks around for a few months longer than it should, the mere interest on the investment, without figuring the possibilities of turning the money over profitably in other sales, is going to reduce the profit margin, when the lumber is actually sold, to a rather low figure.

Thus, in the last analysis, the question of the success or failure of the plan of picking out the long stuff depends on this factor: Has the short stuff remaining been moved at a good price within a reasonable time? Consequently the whole story, from the standpoint of the lumberman, lies in disposing of short lengths.

A shrewd wholesale hardwood man in one of the leading markets of the Ohio valley stated to the writer not long ago that he sincerely believed a lot of consumers, especially interior finish men, were deceiving themselves badly in pushing too hard for long stuff.

"Why," he said, "I know of a block of good chestnut, 10′ long, with some 12′ in the lot, which can be had for $5 or $6 a thousand less than lumber containing 14′ and 16′ lengths. Yet a lot of consumers shy at the first lot, just because it's short stuff, without stopping to consider the difference in cost, and what it amounts to in the long run. If a manufacturer of this kind buys 50,000 feet of chestnut, with a guarantee of a third long boards, and pays $5 a thousand more than he would have to pay for the short stuff I am referring to, the lot has cost him $250 more; and this extra cost is concentrated on the long, naturally, making its price actually $15 a thousand more than was paid for the short. It doesn't seem to me to be possible that there is that much difference in value."

The case cited is of course extreme. Ordinarly the difference in the price is not as much as that indicated, and for the general run of trade the added cost of long lumber is not as much greater as suggested; but neverthless the instance quoted serves to make the point that consumers do sometimes set up long lengths as a kind of fetish, and in striving to get material which will fit into their business most readily they pay prices which are more than the lumber is worth to them.

This is not decrying the value of long lumber, by any means; as a matter of fact, a manufacturer of interior finish stated recently that there are many cases in his business when long stuff is not merely desirable, but necessary.

"Of course," he explained, "we can use a lot of short lengths, making heads and aprons and other short dimension stuff after we have cut the full casing lengths out of boards of that size. But when we come to making long ceiling beams, baseboards, and other stock which will not splice readily, we just have to have long lumber. The tendency nowadays to build bungalows and other similar types of homes with exceptionally large rooms has called for a greater percentage of long lumber in the interior finish trade, and that is one reason why the purchase of much exclusively short-length lumber would not appeal to me, unless the price were mighty low. In that case I could buy enough special lengths to take care of my requirements. Personally, though, I prefer to buy the regular run of lumber, with the proviso that if it doesn't run properly as to lengths it won't be accepted."

And the consumer is, of course, in a position to enforce this provision, so that many lumbermen make a special point of giving their customers among the planing-mill and interior-finish trade better lengths than the price really justifies, simply because they know that this character of stock is needed, making it all the harder on the man who solicits this trade with nothing but short stock to offer.

In the interior finish trade, as in many others, however, the dimensions of the lumber form a secondary consideration to the intelligence of the men at the saws. Some sawyers and cutters in a factory of this kind can get all that is necessary out of what would ordinarily be regarded as short stuff; while others will make kindling wood out of long boards. But when the mill has a good, practical crew of men at work, with a careful foreman, who sees that in working up each job the long cuttings are made first, before the short are touched, in order that there may be an opportunity to get the hard sizes out of the stock before it is cut into for the easier dimensions, good results can be secured with a minimum of long stock.

Lumbermen with short lengths to dispose of have found that the matter of separating as to width plays an important part. In lines consuming poplar, for example, it has become well known that when the lumber is piled for width it is much more desirable from the standpoint of the user.

The big advantage of this plan is not only that a better price can frequently be realized for each width, sold separately, than if random dimensions were offered, but that placing the emphasis on the width helps to distract attention from the matter of length. In other words, instead of allowing the shortness of the boards to make them undesirable in the eyes of the customer, a negative quality is transformed into a positive one by concentrating on width and leading with this feature. This is not only a practical, useful plan which saves effort on the part of both lumberman and consumer, but also has something of applied psychology back of it.

There is an occasional market for short stuff, offered merely that way without the protection of special widths. One manufacturer who formerly made up his short poplar into lath, netting only a fair return, found a man who could use all of his short stuff without its being worked, so that he is getting a little more than before, without the trouble and investment required to convert it into lath.

The Penetrability of Wood

The preservation of timber by impregnating it with various antiseptics is now well established in this country. One of the important problems connected with the treatment has to do with the differences in the penetrability exhibited not only by woods of different species, but also by individual specimens of the same kind. There is considerable divergence of opinion as to how far it is practicable to attempt to group ties and other material for each charge of the retort. On one point, however, operators are generally agreed, namely, that much better results are obtained when the timber treated is well seasoned.

When wood becomes dry its penetrability by both gases and liquids is increased to a decided extent. The same piece of white oak which will, while green, effectually withstand an air pressure of 150 pounds per square inch, will, when dry, allow the passage of air, not only through the vessels but also the other elements, under a pressure of five pounds or less. According to the theory of Mr. Tiemann and other investigators of the Forest Service the explanation of this is that the drying of the cells causes minute checks or slits to occur in the cell walls, thus allowing free passage from one cell to another. The drier the wood becomes the larger are the slits and the more permeable the wood. These slits do not entirely close when wood is soaked, so that wood once dried cannot be restored to its original condition of impenetrability.

Since it is possible to observe these slits under a microscope, and as their presence explains satisfactorily many of the phenomena of drying, Tiemann's theory has been generally accepted as correct. In a recent issue of the Forestry Quarterly, however, Mr. Bailey of the Harvard School of Forestry publishes the results of his investigations on the subject. While in some points he verified the findings of the government experts, on the whole he attempts to disprove their conclusions and offers a different explanation for the increase in penetrability incident to drying.

He found, for instance, that spiral cracks in the walls of tracheids and fibers occur in only a small percentage of dry wood, and that when present in softwoods are confined to the heavy, thick-walled cells at the end of the year's growth. The most important finding, however, is that these cracks do not extend entirely through the cell walls, but are confined to the thickened portion of it, the original or primary cell wall remaining intact. It is this wall which completely surrounds every cell and separates it from its neighbors, preventing the passage of heavy oils and of undissolved gases. It is here that the two theories come in conflict, since the government investigators held that the checks extended through the primary wall as well as through the thickened portions.

It is also claimed in this paper that in some longleaf pine paving blocks examined, when the penetration of the creosote was confined largely to the dense bands of summerwood, the walls of the cells composing the latter were in the majority of cases found to be unruptured. It is further stated that air passes as easily through dry cells whose walls are unruptured as through cells whose secondary walls have been cracked in drying, while in many cases air cannot be passed through dried cells whose secondary walls possess well developed slits or cracks. From these tests the writer of the paper concludes that Tiemann's hypothesis regarding the effect of the slits cannot account for the penetration of gases and oils into seasoned wood.

How then is the known increase in penetrability to be explained? It is very evident that some change must have been made in the wood. It is well known that conifers or softwoods are composed largely of minute fibrous cells with closed ends, and are devoid of open vessels such as occur in hardwoods. Liquids in passing through these closed cells travel primarily in the cavities of the cells and pass from one to another by means of delicately constructed valves or bordered pits in the cell walls. It has always been supposed that the membranes of these bordered pits were entire. The pit membrane is merely a portion of the primary cell wall which has not been thickened, thus leaving a thin place through which water could filter. The pit is the thin spot, and as the thickened portion grows out over it to some extent it gives the appearance of a border, hence the name bordered pit.

According to this article the membranes of the bordered pits are not always entire, but possess numerous minute perforations whose presence may be demonstrated by careful microscopic examination and by experimental means such as passing through green sapwood water containing very fine particles of carbon held in suspension. The particles passed through without difficulty.

The investigator concludes that when wood is thoroughly dried no structural modification, such as the rupturing of the cell walls, is essential in order to account for the penetration of gases and preservatives into seasoned wood; but that whenever preservatives are injected rapidly into green or seasoned wood, the penetration takes place primarily through the cavities of the cells, and the preservatives pass from one cell to another through the bordered pits. In green wood the bordered pits and membranes are comparatively impermeable to undissolved gases and to oils and other heavy or viscous liquids. This is largely due to the fact that the pit membrane is saturated with water, the surface tension of which resists the gases and liquids, except in water solutions. Drying not only removes the water from the pit membranes but also in some cases ruptures them, which accounts for the fact that resoaked dry wood is less impervious to air than green material.

R. C. D.

Plain Oak in Furniture

There are indications that plain oak is to have quite a run in high-grade furniture. It has been featured for some time in office furniture. Very attractive samples of plain oak furniture in natural finish have been displayed in show windows, and there is some speculation in furniture circles as to how far this idea may extend, and as to whether or not it will immediately become a strong feature in the high-grade furniture trade.

Plain oak has suffered considerably from neglect for a good many years and it really has an inning due it in the furniture trade, not merely in the cheaper and less pretentious furniture, but also the high-grade furniture that is well finished. The plain oak office furniture that has been shown exhibited a quality of workmanship and finish that made it very attractive, and it furnishes evidence, were evidence necessary, that plain oak is good material for the finest kind of furniture, and will take on a finish that makes it show off well in the best of company.

For the past four or five years, or perhaps longer, quartered oak, mahogany, Circassian walnut and gum have vied with each other so much in the furniture trade and have been objects of so much concentrated attention that plain oak has been neglected until the plain oak product has practically disappeared from first-class furniture stores. It is getting attention now and it is in such condition in this relation to furniture manufacturers that the present may well be regarded as a psychological moment for boosting and pushing plain oak. The furniture trade itself is ripe for it, and is in a more or less speculative mood as to how the public will take to it if it is used in the better designs of furniture, and properly finished. As the case now stands, it looks as though all that is needed to create a boom in plain oak in the furniture trade is a bit of judicious boosting and exploiting and due care on the part of the furniture manufacturers in the uses to which they put it that they may not kill off its rising popularity with something freakish and unsightly in design.

Every man that has ever made oak lumber or has worked it into furniture should know without being told that it is a great cabinet wood, and has many elements of beauty not found in other woods. It is a wood that belongs in the best classes of woodwork, whether it be in the furniture or in interior trim.

Checking of Wood in Seasoning

It is a matter of the most common observation that wood checks or cracks upon drying. In some cases the extent of the checking is much greater than in others; for instance one piece of wood may split all to pieces while another will show only very small cracks. It is noted that large timbers, particularly those in the round, are more damaged than small pieces of the same material; that hardwoods usually check more than conifers; dense woods more than soft ones. It is also observed that checking usually begins at the ends of a stick, is more pronounced in some portions than in others, though the largest cracks are mostly along a radius. Again, it will be found that while some crevices open wider and wider as drying proceeds, others tend to close up and become imperceptible.



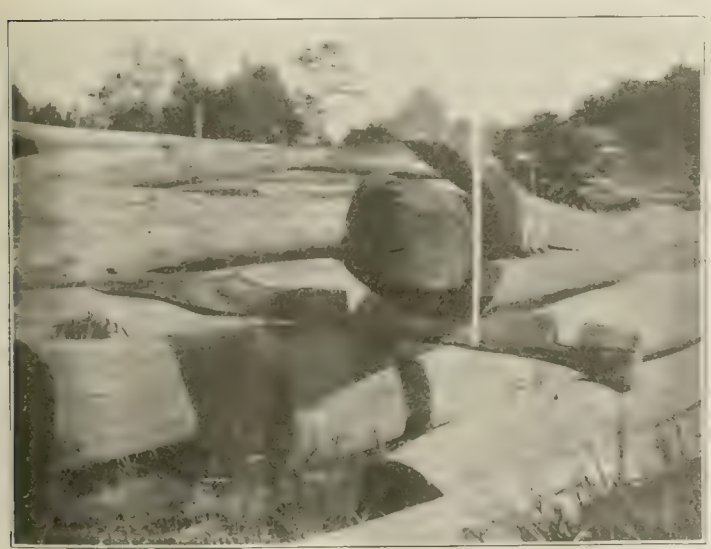
CHECKING AND SPLITTING CONTROLLED BY THE USE OF S-IRONS.

This tendency of wood to check is a matter of great economic concern, for vast quantities of timber are annually rendered unfit for use or lowered in grade on this account. It is estimated that the waste due to checking is ten per cent in hardwoods and three per cent in conifers, making the value of material wasted in drying nearly $22,000,000 annually. When wood once splits it never knits together again; consequently the presence of checks, no matter how imperceptible, always impairs the strength and stiffness of wood. For a great many purposes for which wood is employed, strength and stiffness are highly important considerations, and these mechanical properties depend largely upon the degree to which wood is seasoned. As seasoning progresses the mechanical properties are improved so that by carefully drying a stick of green wood it is possible to double or in exceptional cases to quadruple its strength. In the ordinary processes of seasoning, however, checking, which always occurs to some extent when wood is dried, may partially or even entirely counterbalance the gain in strength due to drying. Consequently with large timbers in commercial use it is not safe to count upon any greater strength, even after seasoning, than that of the green condition.

What causes wood to check? The answer is simple;—unequal or irregular shrinkage. Why is shrinkage not uniform in all directions or throughout the entire piece? To answer this requires consideration of a number of different things. If wood were a homogeneous substance, as much so, for example, as concrete or metal, loss of water would be accompanied only by a reduction in volume. But it is far from being a homogeneous substance—in fact, it is a structure so intricate in design that there is nothing of man's construction with which to compare it. This is particularly true of the hardwoods which are more complex than the conifers.

Wood is composed of cells of various kinds. Some are fibrous and strong, others blunt and weak; some have thick walls, some have thin; some extend up and down the tree, others are disposed at right angles to them; some have continuous walls while others have walls with many thin places or pits in them to allow communication with neighboring cells. With a possible variation in length, in direction, in arrangement, and in the thickness and character of the cell wall, it is readily understood why no two pieces of wood or any two portions of the same wood can be exactly alike. With the differences in structure come differences in behavior which make it next to impossible to formulate rules which can be applied to specific cases. One of the biggest problems today before the wood preservers is to determine in advance how timbers are going to act when placed in the retort, but for the most part a tie has to be opened up before the extent of penetration of the liquid can even be approximated. Much the same is true in seasoning lumber, for no hard and fast rules can be applied with success. One must have a knowledge of the fundamental principles involved and vary the procedure in a given case to fit the actual conditions as they arise.

In green wood the cells are all intimately joined together and are their natural or normal size when saturated with water. As long as this condition is maintained the wood is practically free from internal strains. Water occurs in living wood in three conditions,



SPLITTING OF POLE DUE TO GREATER SHRINKAGE OF THE SAPWOOD THAN OF THE HEART.



CHARACTERISTIC CHECKING AND SPLITTING OF EUCALYPTUS LOGS.

namely, in the cell walls, in the protoplasmic contents of the cells, and as free water in the cell cavities and spaces. It is only the water within the cell walls that counts, for as long as the amount there remains undisturbed the size and shape of the cells will remain the same. The cell walls may be considered as made up of little particles with water between them. When wood is dried the films of water between the particles become thinner and thinner until almost entirely gone. As a result the cell walls grow thinner with loss of moisture—in other words the cell shrinks.

It is at once evident that if drying does not take place uniformly throughout an entire piece of timber the shrinkage as a whole cannot be uniform. The process of drying is from the outside inward. Now if it can be brought about that the loss of moisture at the surface is met by a steady capillary current of water from the inside, the shrinkage, so far as the degree of moisture affected, would be uniform. In the best type of dry kilns this condition is approximated by first heating the wood thoroughly in a moist atmosphere before allowing drying to begin. In air-seasoning and in ordinary dry kilns this condition too often is not attained and the result is that a dry shell is formed which incloses a moist interior. Subsequent drying out of the inner portion is rendered more difficult by this case-hardened condition. If the outer dries and shrinks and the inner does not, the stretching effect produced is sure to cause checking at the surface. Later when the inner part dries it tends to shrink away from the outer shell, and numerous cracks open up, often producing a "honeycombed" condition.

For a given surface area the loss of water from wood is always greater from the ends than from the sides. This, of course, is due to the fact that the vessels and other water carriers are cut across, allowing ready entrance of drying air and outlet for the water vapor. Water does not flow out of boards and timbers of its own accord, but must be evaporated, though it may be forced out of very sappy specimens by heat. In drying a log or pole with the bark on, most of the water must be evaporated through the ends; but in the case of peeled timbers and sawn boards, the loss is greatest from the surface because the area exposed is so much greater.

The more rapid drying of the ends causes a shrinkage and if the material were sufficiently plastic the ends would become bluntly tapering. The rigidity of the wood substance prevents this and the wood pulls apart. Later, as the rest of the stick dries out, many of the checks will come together. Some of the largest, however, will remain and even increase in size as the drying proceeds. These are caused not by unequal drying, but by unequal shrinkage due to structural peculiarities which will be explained shortly.

When cells composing wood dry out, their walls become thinner. The thicker the cell wall the greater will be the shrinkage upon drying. Since in all our woods cells with thick walls and cells with thin walls are more or less intermixed, and especially as the wood first formed in a season (springwood) nearly always differs from that formed in summer and fall (summerwood) in this respect, strains occur with loss of water, because the summerwood, being of thicker-walled cells, shrinks more than springwood. Heavier wood in general shrinks more than light wood of the same kind. It will not do, of course, to compare the shrinkage of one kind of wood with that of a different kind on a basis of weight or density, since extra weight in some cases may be due to infiltrated substances such as resins, gums, and pigments which tend to reduce shrinkage. Sapwood as a rule shrinks more than heartwood of the same tree, due to its greater moisture content and the lack of infiltrated substances; on this account sapwood is more liable to check than heartwood. This tendency, however, may be offset by differences in density, since light, porous sapwood would probably shrink less than hard, heavy heartwood. Moreover, there are often present in the hearts of trees various forms of shake or splits, such as star shake, cup shake, etc., which will open up on subsequent drying. Such cracks can be distinguished from season checks by the slight discoloration of the surfaces, much as an old flaw in iron can be told from a fresh break.

Everything else being equal, the denser a wood is the more it will shrink, and therefore the greater its tendency to check. In ring-porous woods, such as oak, ash, hickory, chestnut, black locust and others, the more rapid the growth, within certain limits, the denser the wood. Hence woods from second-growth trees of this class are more difficult to season without injury than slowly grown material from virgin forests. The oak best suited for ties, because of its strength and wear-resistance, is hard and heavy, and on that account is rendered the more difficult to dry without splitting to pieces. In the case of conifers and of diffuse-porous woods, such as beech, birch, maple, poplar and others, the relation of density and therefore of checking to rate of growth cannot be definitely stated; but here also the denser the wood, as indicated by the greater proportion of darker summerwood, the more it will shrink and the greater its liability to check.

It is a curious fact that a cell shrinks very little lengthwise. A dry wood cell is therefore practically of the same length as it was in a green or saturated condition, but is smaller in cross section, has thinner walls, and a larger cavity. It is at once apparent that this fact makes shrinkage more irregular, for wherever cells cross each other at a decided angle they will tend to pull apart upon drying. This occurs wherever pith rays and wood fibers meet. A considerable portion of every wood is made up of these rays which for the most part have their cells lying in a radial direction instead of longitudinally. In pine over 15,000 of these occur on a square inch of a tangential section, and even in oak the very large rays which are readily visible to the eye as flakes on quarter-sawed material, represent scarcely one per cent of the number which the microscope reveals.

A pith ray shrinks in height and width, that is, vertically and tangentially as applied to the position in a standing tree, but very little in length or radially. The other elements of the wood shrink radially and tangentially but almost none lengthwise or vertically, as applied to the tree. Here then, we find the shrinkage of the rays tending to shorten a stick of wood while the other cells resist it, and the tendency of a stick to get smaller in circumference is resisted by the endwise reaction or thrust of the rays. Only in a tangential direction or around the stick in direction of the annual rings of growth do the two forces coincide. Another factor to the same end is that the denser bands of summerwood are continuous in a tangential direction while radially they are separated by alternate zones of less dense springwood. Consequently the shrinkage along the rings (tangential) is fully twice as much as toward the center (radial). This explains why some cracks open more and more as drying advances.

Although actual shrinkage in length is small, nevertheless the tendency of the rays to shorten a stick produces strains which are responsible for some of the splitting open of ties, posts, and sawed timbers with box heart. At the very center of a tree the wood is light and weak, while farther out it becomes denser and stronger. Longitudinal shrinkage is accordingly least at the center and greater toward the outside, tending to become greatest in the sapwood for the same reasons that shrinkage in other directions is greatest there. When a round or a box heart timber dries fast it splits radially and as drying continues, the cleft widens, partly on account of the greater tangential shrinkage and also because the greater contraction of the outer fibers warps the sections apart. If one will take a small hardwood stem and while green split it for a short distance at the end and place it where it can dry out rapidly he will find that the sections have become bow-shaped with the concave sides out. These various facts taken together explain why, for example, an oak tie, pole or log may split open its entire length if drying proceeds rapidly and far enough.

If wood were perfectly rigid it would be absolutely impossible to dry it without having it break into minute fragments. As it is slightly plastic the cells can adjust or mold themselves to new conditions if the change is not too rapid. When drying is hastened not only is the loss of moisture uneven but the wood substance is not given a chance to reshape itself. Summer-felled timber usually checks worse than winter-felled because it dies faster, due to the warmer weather.

When one understands the causes underlying the checking of wood he is then in position to take the necessary precaution to

prevent it or at least to reduce it materially. Since too rapid air-seasoning is often to blame, the obvious thing to do is to retard it by proper piling. The fact must not, however, be overlooked that there is danger of going to the other extreme and seasoning the material so slowly that there is less from decay, sapstain and mold. Logs, poles, posts and ties should not be allowed to lie on the ground longer than absolutely necessary, especially in warm weather, but should be elevated from several inches to a foot or more. The piles of such material as well as of sawn products should be open enough to allow ventilation, but not too open, the correct solution of the problem depending on the material, the locality, the season of the year and the exposure. Alternate wetting and drying lumber increases very decidedly the liability to checking.

The use of S-shaped thin steel clamps to prevent large checks and splits is now a common practice in this country with crossties and poles, as it has been for a long time in European countries. These devices are driven into the butts of the timbers so as to cross incipient checks and prevent their widening. In place of the regular S-hook which costs from two to three cents according to size, another of crimped iron has been devised. Thin straps of iron with one tapered edge are run between intermeshing cogs and crimped, after which they may be cut off any length desired. The cost of these irons is from one-half to one cent each.

The time for driving S-irons of either form is when the cracks first appear. The Germans have a clamp for placing over the end of a pole to close a bad split before driving in the iron. The superintendent of timber preservation of an eastern railway company that uses zinc chloride has a rule that where checks are not over a quarter-inch in width, the S-irons shall be driven in before treatment; in wider, they shall be driven in immediately after treatment, since the injection of a water solution causes the checks to close up.

In India, where boxwood is cut into round pieces for export, each piece is sawed down to the center along a radius, and this prevents any other cracks, the large opening widening or narrowing according to the degree of moisture of the air. This is also a practice in Japan.

The tendency of logs to split emphasizes the importance of converting them into planks or timbers while in a green condition; otherwise the presence of large checks may render much lumber worthless which might have been cut out in good condition. The loss would not be so great if logs were perfectly straight-grained but this is seldom the case, most trees growing more or less spirally or irregularly. Large pieces crack more than smaller ones, quartered lumber less than that sawed through and through, thin pieces, especially veneers, less than thicker.

In order to prevent cracks at the ends of boards, small straps of wood may be nailed on them or they may be painted. This method is usually considered too expensive except in the case of valuable material. Squares used for shuttles, furniture, gunstocks and tool handles should always be protected at the ends. One of the best means is to dip them into melted paraffine which seals the ends and prevents loss of moisture there. Another method is to glue paper on the ends. In some cases a broad paper is glued on to all the surfaces of valuable exotic balks. Other substances sometimes employed for the purpose of sealing the wood are grease, carbolineum, wax, clay, petroleum, linseed oil, tar, and soluble glass. The tendency of solid porch columns to crack is largely overcome by boring them out. Woodworkers often have trouble with veneered spindles where a solid core is used, since not only the core but also the veneer checks. Some avoid this by not using any solid stock whatever, building up the core instead. In place of solid beams, built-up material is often preferable as the disastrous results of season checks are thereby largely overcome or minimized, and in some cases greater strength is secured.

With increasing scarcity of the better woods the importance of exercising greater care to prevent unnecessary checking is becoming more fully realized and steps are being taken to lessen the waste from that source.

S. J. R.

A New Wood Preserver

Dr. Allen F. Odell, assistant professor of chemistry in the Louisiana State University, recently read a paper before the American Chemical Society, in which he described "a new wood preserver" which he thought might mean great things in hindering decay in different woods. The material which he proposes using is called "cypressene," and is an oil extracted from cypress sawdust. From 275 gallons of crude sawdust he extracted 125 gallons of the oil, by baking or roasting in an iron retort. His plan is to use this oil in treating timbers to prevent decay. It is not very clear how he proposes to do this, but it is assumed that the wood to be treated is immersed in the oil, either under pressure or without it, and the oil will cover the surface and enter the pores of the timber, somewhat as creosote does under present methods of treatment.

Dr. Odell calls cypress the everlasting wood, and believes that he has found and extracted the principle which makes it everlasting, and by impregnating other woods with this principle, they will be rendered immune to decay. It is to be hoped that the claims made for this discovery will be sustained, but several questions arise. In the first place, cypress lacks much of lasting indefinitely when exposed to conditions which favor decay. No wood lasts indefinitely under such circumstances. It is not claimed by the discoverer that tests have actually shown that the oil extracted from cypress sawdust prevents decay when applied to other woods; but only that it will probably do so. There must be actual trials and successes before a claim of the kind can be accepted as a fact. Many schemes look well in theory but fail in practice, and experience only can be depended upon to discover defects, if such exist.

Dr. Odell claims that the oil which he extracted from cypress is what makes that wood durable, and he is probably right. It is well known that the dark woods are generally more durable than those of light color, and the greater durability is doubtless due to the tannin they contain, mixed, of course, with other ingredients deposited while the trees were growing. Decay is caused by the activity of fungi which penetrate the wood, and the timber is preserved by impregnating it with substances poisonous or obnoxious to the fungi. This is done artificially with creosote, and many trees do it naturally with tannin and other substances while growing. Some woods are darker than others because they store up more of this matter. Dr. Odell's method consists of extracting this substance from a wood which has much of it and imparting it to woods which have little. Theoretically, it looks feasible; but in practice the first difficulty will be met when an attempt is made to force the coloring matter into another wood. That is the hardest thing which wood-treating engineers meet. It is next to impossible to force the liquid into the pores of some woods. The real invention that is awaited is not so much a new material for treating wood, as a better method of forcing the material into the pores.

California redwood is as durable as cypress, and of much deeper color. If the coloring matter extracted from cypress can be used in a practicable way to preserve other woods, there is no apparent reason why much larger quantities might not be extracted from redwood and applied in the same way. Other dark-colored woods which might be employed are: Sequoia, black walnut, mesquite, black locust, catalpa, Osage orange and many of the south Florida species.

Wanted—New Operating System

Just now many manufacturers and users of glued-up panels are experiencing a condition which constitutes the weakest point in the sales proposition of the panel trade.

The condition applies at present to that section of the trade located in the Ohio valley and affected by the recent floods of the Ohio and tributary streams. Some of the panel plants were put out of commission for a considerable period, losing in some cases two weeks' running time plus an equal period devoted to getting straightened out and moving along smoothly as before.

The weakness disclosed is not confined to a period of floods, but develops whenever there is a sudden stoppage of manufacturing facilities. It turns up whenever demand becomes unusually big and the factories are crowded to such an extent that they are unable to get goods out in the usual time.

It is then that consumers of panels rise up and say things that would not look well in print. They call on the panel manufacturers to do things that are utterly impossible; to get out panels in thirty days when the manufacturer knows that it will take from sixty to ninety. Sometimes rash promises regarding deliveries are made under the stress of a demand of this kind, accentuated as at present by interruption due to high waters and at other times by the deluge of unexpected business. But the result is the same—delayed deliveries and disappointed customers.

The case of the panel factory against the private gluing-up plant has been pretty thoroughly established. The furniture man knows, for example, that to put in machinery which will do the work as well as it is done in the panel factory would involve an investment that he is not ready to make, and that his crew cannot possibly learn the ins and outs of laying veneers as well as they are learned in an up-to-date factory devoted exclusively to that line. So as far as quality and price and convenience—as a rule—are concerned, the consumer is perfectly willing to turn the job over to the exclusive manufacturer of panels.

But if the consumer can't get his panels when he wants them; if he is held up in his own operations, and is unable to supply customers with goods just when customers need them to take advantage of current demand on the part of the retail trade; if, in other words, the panel plant falls down at its most vital point—that of service—what is the consumer going to say about the proposition?

Such fall-downs are not the rule, but even if they come only occasionally, they are bound to be remembered and to militate against what should be continuous growth and development on the part of the panel business. Even during normal times there is constant conflict between the panel man and his customer regarding deliveries, the consumer invariably urging more speed and hurry-up methods in order to finish cases which he is holding in his factory, unable to complete, because of the lack of panels, fronts, tops, drawer bottoms and other built-up goods which he has contracted for on the outside.

This situation, in the opinion of the writer, who has talked to leading men on both sides of the fence, constitutes the most serious problem with which the built-up panel trade has to deal.

Is there any way in which it can be met?

The panel man says frankly that it takes, under normal conditions, thirty days to get out the average order, and under difficulties or abnormal conditions possibly two or three times as long. His solution is to have the consumer order his goods far enough in advance of his requirements not to be forced to worry over non-delivery.

That, of course, is one way out. As a matter of fact, it is being adopted by a good many consuming factories, although unquestionably it is a rather heroic method. Some factories down in the Southeast, which make medium-grade furniture with staple designs, as a rule know pretty well what their requirements are going to be months in advance; and they are accordingly able to place contracts for carload lots, which can be manufactured and delivered in plenty of time for their gradual use during the season.

Where this can be done, the condition is ideal from the standpoint of both parties, but, without considering the larger investment in material that is thus made necessary on the part of the consuming manufacturer, it must be remembered that many factories are unable to anticipate their needs in this way. If they are turning out a large number of new designs each season, they are compelled to await the verdict of the trade before knowing which to feature. They are up against a hard proposition when it comes to "picking the winners" far enough in advance to place orders for built-up tops.

And yet the furniture men are learning a lesson in this respect. They have realized that it doesn't pay to have to delay deliveries to good customers who want prompt service, and that it is worth while to put a big stock in the warehouse to enable this trade to be taken care of. Consequently it is noticeable that many of the manufacturers, especially if they make a medium-grade line, pile up a sufficient surplus to enable them to take care of orders just as they are received. This means, of course, anticipating their panel wants by a good margin, and making it possible for the panel men to get out the stock in plenty of time without rushing the work through too hastily.

But, as indicated, this is something which can be done only in connection with staple designs. Many manufacturers rely on the novelty of their offerings each season to get business, and as a matter of fact admit that the novelty must necessarily be overdone merely in order to stimulate trade interest and give the salesmen something to talk about. Maybe ultimately they will see the folly of bringing on a multitude of new designs for which there is little or no necessity, merely for the sake of having something new to show the retailers at the semi-annual exhibits.

As progress is made in the direction of fewer new numbers each season, more storage of staple designs, and more effort in the direction of ordering as far ahead as possible, the furniture men will find their problems decreasing. But can the panel man do nothing to help the cause of good service to the consuming trade? Is it not practicable for him to anticipate the wants of his customers to the extent of having some surplus stock on hand, so that emergencies can be taken care of? Would it not be good business policy to invest some money in goods of this kind, even though they might not be needed immediately, for the sake of tiding over periods when the factory is not able to deliver the panels as rapidly as they are needed?

Most panel men answer these questions with an emphatic "No." And yet there is a lingering suspicion that if they found it absolutely necessary, in order to retain the trade and good will of the consuming interests, they would make a point of doing so.

How many panel men, for instance, have a record showing the exact number of panels of each thickness, size and kind furnished to the consuming trade during the preceding year? Would not such a record immediately suggest which panels would constitute safe items on which to concentrate idle time in the factory? It is well-known that most panel plants run from high to low and from low to high, in the amount of operating time they put in. Obviously, it would be an advantage to run at an even pace all the way along, though this is impossible as long as no goods are made up except on order from the consumer. Filling in the low spots by manufacturing panels to put into stock would help a great deal as far as increasing operating efficiency is concerned. Maybe the panel man would make up some goods which would prove unsalable, and which nobody would call for, no matter how long they were held. But, on the other hand, how much of a hit would be made with a customer who needed panels right away, and who found a place where he could have them delivered the next day!

Some panel men admit that in this way they have occasionally tried to anticipate the wants of a given customer by making up additional stock, along the lines of panels previously ordered. But luck is against many of these attempts to "call the turn," and the glued-up stock manufacturers have a good many stories to tell how the customer decided to change the dimensions of his goods as soon as the labor and expense of manufacture had been put into this reserve supply of panels. But it is certain that careful and serious

attention has not been paid to the plan heretofore, and it is within the range of possibilities that study of the question might aid in solving this big problem, which is one of the most important obstacles in the way of the complete success of the trade.

It might be worth while, too, for the panel men to make a point of attending the furniture shows, looking over the lines and noting the changes, if any of consequence were made, in the character and dimensions of the tops and fronts. By this plan he would be able to check his figures on the consumption of various sizes the preceding season, and thus have a guide to future operations in the way of laying up surplus stock for emergency calls.

At any rate, the plan seems to be worth considering. C. D. C., Jr.

The World's Timber Supply

The amount of timber in the world is a subject for estimate and speculation. There is considerable difference of opinion as to the quantity in the forests of the United tates, not to speak of various other countries. Nevertheless, statisticians have attempted from time to time to compile figures for the whole world. One such effort is in the form of a bulletin (No. 83) by Raphael Zon of the United States Forest Service. He has condensed the best of the world's statistics on the subject into a publication of ninety pages. The figures for Europe are in detail and doubtless are nearly correct; but elsewhere the values are very general, and for large regions of the earth's surface details are almost wholly lacking.

It is a matter of surprise that Europe has a larger forested area than South America. The popular impression has been that Brazil alone has a larger wooded area than the aggregate forests of all Europe. It would appear, however, from Mr. Zon's figures, that such is not the case, and that the wooded area of Europe exceeds that of the whole of South America by more than 200,000,000 acres. That is, it is one-third greater.

The surprise at the wooded lands of Asia will not be much less. It is well known that vast regions across that continent from Arabia to China are practically treeless; but north of that region in Siberia, and south of it in India and Siam, enormous tracts are more or less wooded. Siberia itself is nearly as large as Europe, and its forests have been supposed to be very extensive. In spite of this, however, the figures show that Asia has 140,000,000 acres less forest than Europe.

Figures for Africa also contain surprises, though the popular notion concerning that continent is associated more with deserts than with wooded regions. Much has been written in books of travel concerning vast, pathless, and interminable forests of central Africa. The impression gained from such reading is that the jungles of the Dark Continent are extensive enough to form empires and kingdoms. Modern travel and fuller explorations have lessened very materially the former supposed boundaries of the forests of Equatorial Africa; and now Mr. Zon sums up all the evidence and gives to the whole continent of Africa only about one-third as great forest area as Europe has.

North America is the only grand division of the earth that outclasses Europe in forest area. The region included embraces all the land between the Arctic ocean and Mexico, that is, it includes Canada and the United States. The wooded area is nearly double that of Europe. The different forest areas of the world follow:

	Acres
West Indies	42,668,800
Australasia	132,864,992
Africa	259,253,047
South America	528,000,000
Asia	611,149,170
Europe	750,112,821
North America	1,476,360,000
Total for the world	3,800,408,830

This figures a little more than two acres of woodland for every inhabitant of earth. It is a little less than one-fourth of the land area of the world. No figures are offered for the purpose of showing what the world's total stand of timber may be. From the nature of the case, this could be no better than a general estimate based on so much per acre, and there is little information on which to base such an estimate. The statistics compiled by the Bureau of Corporations indicate that for the United States the average stand of merchantable timber is about 5,000 feet, board measure, per acre of forested area. If it is assumed that the average for the world's entire forested area is half of that, a general estimate can be made, basing it on the forested area of 3,800,408,830 acres. The total is thus shown to be 9,501,022,075,000 feet, board measure. This will do as the roughest kind of an estimate, and it should not be accepted in any other sense.

The statistics of annual output of forest products are based upon information somewhat more accurate, because when lumber goes to market it can be measured more carefully than when it exists as standing timber in uncruised forests. Lumber statistics from all parts of the world, where figures are obtainable, were collected for the bulletin under review, and the total output of forest products, per year, for the entire world, is placed at 38,893,723,151 cubic feet. This includes everything that comes from the forest—lumber, crossties, poles, fuel, pulpwood, cooperage, and miscellaneous commodities. Theoretically, a cubic foot of timber contains twelve board feet; but that reducing factor is too high in practice. Considering the miscellaneous character of the products, six board feet to one cubic foot will give fairly accurate results. Using that reducing factor, it is found that the world's yearly output of forest products is equivalent to 233,362,338,906 board feet.

More than half of this is credited to the United States, and the figures seem too high for this country. If correct, it means that the lumber cut of the United States is not more than one-third of the total annual yield of the forests of this country. The other two-thirds must be made up of fuel, crossties, pulpwood, cooperage, and various other forms of forest products that do not pass through sawmills. Waste in the woods and the mill also accounts for a considerable percentage of this two-thirds.

Wooden Handles in Italy

A consular report on the uses of wooden handles in Italy does not offer much encouragement to the manufacturers of handles in this country who are looking in that direction for trade opportunities, although some American handles are sold there. Nearly all agricultural handles are made by the peasants themselves, who make them as they are needed. They are chiefly of oak and ash. Pickax handles, about three feet long, sell at from five to seven cents each. There is a factory at Turin that has a capacity of 500,000 pickax and hammer handles a year, but it has never been operated to its full capacity. It is not believed that broom handles and long, straight agricultural handles will find much market in Italy in the near future. Neither is it believed that wheel spokes for automobiles, carriages, or wagons can be successfuly imported, because such spokes are made in Italy with American or English machinery. It is believed, however, that an opportunity exists for the importation of American D shovel and spade handles, for pickax handles, and for hammer and hatchet handles of American type.

Shovels and spades with D handles are now imported in fair quantities from Germany, but the handles do not give satisfaction on account of the quality of the wood. The railways use large numbers of these shovels and spades. Pickax handles, if imported, should be of the hardest possible wood and very strong. They should be from thirty-six to forty inches long with an oval section.

The best opportunity probably exists for hammer and hatchet handles. Those now sold are usually of three lengths—14, 18, and 22 inches. Such handles of American make have already been imported.

Available Foreign Hardwoods

COMMERCIAL HARDWOODS FROM TROPICAL AMERICA

Editor's Note

Two questions are commanding a great deal of attention among the producers and consumers of lumber in this country. Probably the most important is the question of available supply of hardwood timber outside of the United States, and the second is the possibility of importing hardwood from foreign countries with the removal of the tariff on lumber. This article is written by an authority on foreign trees and can be deemed absolutely authentic. It is the first of a series which will cover the available hardwoods in foreign parts of the world, and is aimed to give accurate information for the benefit of those interested in hardwood timber or lumber importations from foreign countries.

A very possible source of a good deal of our future timber supply lies in the vast forests which line the banks of the rivers in Mexico and Central America. From the torrid coast line, where the tropical vegetation is rank, to the green slopes of the Cordilleras, where the forests are dense with valuable woods, Mexico presents a great variety of forest types. Woods answering to every possible description may be found there. From the coast to the City of Mexico, nearly 8,000 feet above the sea level, trees of various zones and climates abound. At an altitude of from 3,000 to 4,000 feet the trees begin to change and assume the characteristics of those of the temperate zone; still farther up oaks, pines, cedars, and firs mark the complete transition from the hot to the cold climate, until at last scrubby forms are lost in the snow line nearly 11,000 feet above sea level. The same conditions prevail on the western slope, only here the species of important timber trees are almost entirely different from those on the eastern slope.

On a whole, Mexico and Central America are fairly well timbered, especially in the southern part of Mexico, and the same general observation applies to the West Indies. Practically all the important timber trees in southern Mexico are found throughout tropical America. Mahogany, cedar, logwood, fustic, lignumvitæ, West Indian boxwood, ebony, etc., now constitute the chief timbers exported from all parts of tropical America north of the Canal zone. The timbers which come from countries south of the Canal zone will be treated in a later issue.



BUILDING A RAILROAD FOR HAULING MAHOGANY LOGS IN SOUTHERN MEXICO

In the early days of the tropical American republics the English timber merchants largely controlled the lumber industry and for many years conducted an extremely lucrative business, especially in mahogany and cedar. After the forests of West Africa became better known these merchants turned their attention in that direction, and from that time on (about 1883), the American capitalists became prominent in the exploitation of the more valuable timber in tropical America. Large concessions have been procured by a good many timber companies during the last two or three decades, and during late years they have all been pushing their business very actively and they now generally obtain a good market for their product. Several large firms are now operating on the West coast, while a number are logging on the Gulf coast as far south as the Canal zone.

Although timber consisting very largely of pine and fir may be found on almost every mountain as far south as Guatemala, of sufficient size and quantities for home consumption, and for export, the demand has been largely for fancy woods. Fortunately these woods are found principally along the coast and along the navigable rivers where they are more or less easily accessible. The vast forests of pine, cypress, and fir are confined to the inaccessible places, and for this reason the lumber resources of tropical America have not yet been developed to any appreciable extent. An immense amount of capital is required for the construction of the necessary transportation facilities. After these vast forests, which will supply the necessary construction timber in the future, have been opened up and railroads built to them, they will not only constitute one of the chief articles of export to the United States, but will supply the timber necessary for home consumption. At the present time the demand all through tropical America for construction timber far exceeds the supply. The bulk of this material is obtained from the United States. It is supplied chiefly by Texas, Mississippi, and Louisiana, and a large part of the lumber is the long-leaf pine and white oak for construction purposes.

It is more than likely that many of the enterprises backed by American and European capital throughout Mexico and Central America, which were suspended during the recent troublous times, will soon resume very active operation. There is every indication of an increased demand for lumber of all kinds during the next few years, and this may act as an incentive toward the further development of some of Mexican and Central American timber resources. This exploitation will necessarily be very slow, and vast tracts will still remain untouched after the timber in the United States is exhausted. This critical period has, however, already arrived in respect to some species, for there are a number of manufacturers in the United States who are seeking an alternative in the tropical American forests. The vast forests of Mexican oaks are now being tapped, especially on the west coast, and every attempt is made to introduce these into the markets here. The total value of the wood exported by Mexico alone during 1911 was about $2,000,000. Others are seeking a wood to replace our eastern white pine, which they will be able to find, though difficult to profitably transport to market. The turpentine gatherers in the

South are inquiring as to suitable locations in tropical America in which to operate.

The best grades of our commercial timbers from all sources do not meet the present demands of manufacture, and many of the most important articles of common use are steadily advancing in price, due to increasing scarcity of some kinds of timber in this country. Where is this deficiency to be supplied is a question which is soon to be answered. Experts usually point to tropical America where the lumberman can find a long list of good woods, capable of supplying all deficiencies for many years to come. The importation of lumber from these forests has not been in a ratio equal to the demand. This is due lagrely to the broken character of the soil and the lack of up-to-date methods of lumbering. The methods used by a good many small concerns are crude in the extreme. Gravity slides, oxen, and gangs of men are used in getting the logs to the shipping points. Such methods are crude slow, and expensive.

Practically all the really good woods in tropical America have been tested in the American markets, and many of them are known to large timber merchants and to wood users in this country. A list of the principal kinds that are likely to become more important in the American markets in the future are as follows:



A MUSEUM COLLECTION OF MEXICAN WOODS IN THE COMMERCIAL MUSEUM, PHILADELPHIA, PA.

Mahogany, caoba, (*Swietenia mahagoni*) enjoys the greatest popularity of all tropical American woods, and will continue to be the principal timber for export. The bulk of the mahogany that is left is found in southern Mexico, where in the uplands it is dispersed throughout the general forest in the proportion of about 1 to 500 other trees, while on the lowlands it is found in the proportion of about 1 to 300. Mahogany is not plentiful in Central America and it is also very rare in Cuba. There are still a good many trees in the mountains of Cuba, but they are almost inaccessible with present means of transportation.

Mahogany has been heavily worked along the navigable streams and is now found only in the forests where its removal is becoming more difficult every year. This observation applies to all the regions where mahogany grows. Still the numerous streams and rivers which rise in southern Mexico afford splendid facilities for floating the logs, even from their extreme sources, in the rainy seasons.

Mahogany is of a light brown color tinged with light red when fresh sawed, but soon turns darker if exposed to light and air. It may be said to be hard, though there are grades of it in the Mexican lowlands that are distinctly soft and light, both in weight and color. Mahogany answering to this description is usually graded separately and called "baywood."

The qualities and uses of all grades of true mahogany are well known and it is useless to enumerate them here.

Spanish cedar, cedro colorado, cedrel, or cedren (*Cedrela odorata*) belongs to the same family (*Meliaceæ*) as the true mahogany. There are now more than sixteen species of this genus described from tropical America, and all of them attain commercial size and importance. The Spanish cedar is the only one that has a pronounced aromatic odor and can be readily distinguished by this character from the other cedar woods. It is found chiefly along the rivers and attains a height of from sixty to ninety feet and a diameter of from two to four or more feet. This species is fairly abundant in the virgin forests, though at present almost inaccessible in a good many locations. The wood is moderately soft, light, and floats in water when it is thoroughly seasoned. It is very durable in contact with the soil and water, and is much used for boards and locally for canoe-making. Spanish cedar wood is in great demand in the United States for making cigar boxes and often sells for a higher price than true mahogany.

Bullet-wood, balata, bully, or horseflesh (*Mimusops globoso*) is a fairly abundant tree in Central America and is from eighty to one hundred feet in height and from five to seven feet in diameter. There are four varieties of the wood, known in the trade as the red, black, white, and yellow bullet-wood. It grows principally on low hills and along the streams and rivers. The wood is very hard, heavy, strong, tough, fine and straight-grained, and is easily worked. It is very durable and lasts indefinitely in water and is used for bridge and house building. It is as valuable as mahogany or oak for most purposes, but it is stronger and more durable.

Blackwood, madera negro, or madre de cacao (*Gliricidia maculata*) is a tree from forty to sixty feet in height and from one to three in diameter. It is very abundant on the west side of the watershed and is rarely found on the east. The wood is very hard, heavy, and very fine-grained, and is used for house framing and cabinet work, for railroad ties, posts, and wherever great strength and durability are required. It is also used occasionally for bridge building, but the majority of the logs are so crooked that they are not fitted for this purpose. It is said that blackwood is known to last in the ground for one hundred years, and is often used in place of the true lignum-vitæ.

Sapodillo, naceberry, sapotillo, espanel, sapote, or limonero rojo (*Achras sapota*) is a fairly abundant tree and varies from fifty to one hundred feet in height and often from four to five feet in diameter. It grows on the low hills on the Atlantic side and is cultivated on the west side. The wood is very hard, heavy, strong, tough, and splits with difficulty. It is proof against the teredo and has been found in the ruins of Palenque, where it must have been placed long before the Spanish conquest. While it is difficult to work, it makes handsome furniture, and is much used for house framing. The tree yields a well-known fruit.

Fustic, Cuba wood, yellow-wood, mora, mora de cortez (*Chlorophora tinctoria*) attains a height of from twenty-five to fifty feet and a diameter of two feet or more. It yields the valuable yellow, brown, and green dyestuffs. The nearly white sapwood is very thin, and the greater portion of the tree therefore is heartwood,

the only part put to commercial use. Freshly-cut heartwood is light yellow, but after exposure to air and light becomes a yellowish brown. It is very hard, heavy (about fifty pounds per cubic foot), strong, tough, and is very durable in contact with the soil.

False mahogany, corotu, conocaste, toncolin, or timbouva (*Enterolobium cyclocarpum*) is a large tree often from ninety to one hundred and thirty feet in height and from six to eight or sometimes ten in diameter. The tree is nowhere very abundant, but it attains its best development in the deep hollows of the eastern slopes. The wood is dark brown, moderately hard and heavy (about thirty-five pounds per cubic foot), fairly strong and tough, coarse and straight-grained, works very easily, and takes a good polish. It is durable in contact with the soil and water and is used extensively for making canoes. It is also employed in house building, cabinet and furniture making, and general carpentry work.

White mahogany or prima vera (*Tabebuia donnellsmithii*) is chiefly a Mexican tree, but it grows also in British Honduras. It forms a fairly large-sized tree and often has a clear trunk from thirty to forty feet and from two to three feet in diameter. This tree is nowhere abundant on the eastern coast. It finds its best development in southwestern Mexico. The wood is light yellow, moderately hard, heavy (about thirty pounds per cubic foot), strong, tough, and very durable in contact with the soil. Its most important use at the present time is for furniture and interior finish. It has a very fine and pleasing grain and takes and retains a beautiful polish when properly filled and finished.



WEST INDIAN CANDLEWOOD (*DACRYODES EXCELSA*). VERY COMMON IN PORTO RICO

Santa Maria, palo maria, or galba (*Calophyllum calaba*) is a lofty tree, often attaining the height of one hundred and fifty feet and five feet or over in diameter. The trunk is usually clear of branches and knots for more than half the total height of the tree and is as straight as a ship's mast. The wood is of a light brown color, tinged with red or yellow, and after it is exposed to the light and air, it resembles mahogany. It is slightly coarser-grained than mahogany. The wood takes an excellent polish and the alternating lines of lighter and darker shades on the radial surface add to it considerable figure. It is hard, heavy (about forty-six pounds per cubic foot), strong, tough, and bears exposure to moisture and lasts well in water. It is used for construction work, shipbuilding, and heavy machine work; for posts, furniture, felloes of wheels, interior finish, and largely for shingles, especially in the West Indies. The wood is highly esteemed for carpentry work and the trunks of large trees are used for making canoes.

Espave (*Anacardium rhinocarpus*) is a tree from eighty to one hundred feet high and from three to five feet in diameter. The wood is light brown at first with a shade of yellow, but turns darker upon exposure to light and air. It is fine, but cross-grained, assumes a fine polish, hard, moderately heavy, strong, tough, and durable. Espave is now used locally and in this country for making furniture and cabinet work. It has been introduced into the American markets as espave mahogany.

Logwood or campeche wood (*Hæmotoxylon campechianum*) often reaches fifty feet in height and from twelve to eighteen inches in diameter. The wood is very hard, heavy, strong, tough, very fine-grained, and almost indestructible in contact with soil and air. It is imported chiefly in short lengths, after which it is chipped or ground, and packed in casks and bags ready for the dyers', hatters', and calico printers' use. This wood is seldom used for structural purposes or for furniture, because it is more valuable for making dyes, which it yields to water and alcohol. Yucatan is said to produce the best wood for this purpose.

Hymenæa courbaril, the West Indian locust tree grows abundantly and to a great size in the forests of South America, where it frequently attains a height of from sixty to eighty feet to the first limb and has a diameter of six to nine feet. The wood is light brown, with dark streaks, but sometimes it varies to a dark mahogany color. It is exceedingly hard, compact, and close-grained, taking a high polish, and is employed extensively for furniture, engine work, and planking of vessels.

Lignum-vitæ (*Guayacan officinale*) is a tree which usually attains a height of from fifteen to twenty-five feet and a diameter of about eighteen inches four feet from the ground. In Mexico and Central America this tree attains its best development and often grows to a height of from forty to sixty feet and nearly two feet in diameter. It is usually much smaller in the West Indies. The wood is exceedingly close and cross-grained, hard, heavy (about seventy-six pounds per cubic foot), of a rich greenish-brown color, and often beautifully marked, looking very well when polished. It is often used for making furniture, ship-blocks, pestles, mortars, rulers, heads of croquet mallets, and string-boxes and machine bearings. It is preferable to metal for the latter uses. The wood is very durable and this quality coupled with its extreme strength and hardness renders it one of the most valuable of tropical America. Enormous quantities of this wood are now being used annually for bearings, etc., and the supply is becoming limited and consequently very high.

White or red cedar (*Icica altissima*) is a native of Central America, where the tree grows to a height of about one hundred feet. The wood squares from one to three feet, and is of a dingy yellow color, rather open-grained, but takes a good polish. It is easily worked and liable to split. A strong aromatic odor is contained in the wood, which effectually keeps away insects, and adapts it for cabinets and wardrobes. This wood is not from a cone-bearing tree and, therefore, not related to any of the so-called "cedars" growing naturally in the various sections of North America.

Quirá or roble (*Platymiscium polystachium*) is an important tree found chiefly in Central America and plentifully in the forests of Panama and Costa Rica. It produces a very hard, strong, and tough wood which closely resembles the related wood which is now imported under the trade name of coccobola. The latter has not been botanically described. The wood of quira is said to be the most important timber of Costa Rica and is used for all purposes requiring strength and durability.

Spanish elm or cip wood (*Cordia gerascanthus*) is a native of all parts of the West Indies and Central America. It is occasionally imported into this country and is likely to find a good market here. The tree grows from sixty to eighty feet in height and produces a moderately hard, close-grained timber of a dark brown color, with occasional deep-colored markings. It is a good wood and takes a fairly fine polish and is much used in Jamaica for cart bodies and for various other purposes.

L. L. D.

One reason why the wagon and implement people have their troubles getting enough stock for their needs these days is that they have not been offering enough for it. This stock has not advanced much more in ten years than regular lumber stock has in one year, so the millmen naturally turn to the regular stock.

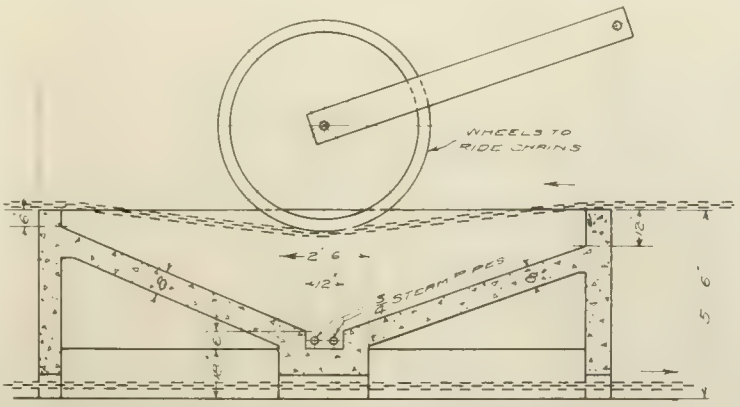
Soda Dipping for Sapstain

During the last few years considerable attention has been given the subject of preventing sapstain or mildew in freshly sawn lumber. It is well known that staining of freshly sawn sap timber is due to attack by a fungus, which requires for development a certain amount of moisture, warmth and food supply. Green sapwood lumber contains an abundance of food matter, and if present in the lumber it is almost certain that fungi will attack the wood. Consequently, the most certain and scientific method of preventing the trouble is to annul or neutralize the underlying cause. After considerable experimenting it was found that a high grade of bicarbonate of soda was best adapted to the purpose. Through chemical neutralization bicarbonate of soda kills the sap acid, or, to speak more scientifically, converts the sap acid into a chemical of innocuous properties.

The process is easy enough, consisting simply in dipping the freshly cut boards into a solution of bicarbonate of soda. It is only necessary that the boards be momentarily submerged in the solution, after which they are taken out and stacked on the yard to dry. With reasonable care in preparing the solution and in stacking the lumber afterward, the danger of sapstain is completely obviated.

Experience and experiments have taught that the strength of the solution must vary with the character of the lumber, and with the mill location. Under certain conditions a solution prepared from twenty-five pounds of soda to fifty gallons of water is found sufficiently strong. The amount of soda varies from this up to thirty-five pounds—according to nature of the wood and climatic conditions; the stronger the solution the more rapidly the boards dry out.

A thorough solution should always be secured before turning it into the dipping vat. A separate tank or barrel should be used for preparing the solution. This may be placed with spigot near the bottom over one corner of the dipping tank, and the solution transferred to the latter as needed.



PRACTICAL ARRANGEMENT FOR SODA-DIPPING LUMBER

For pine, the temperature in the vat should be maintained at approximately 140 degrees Fahrenheit; for gum and other hardwood lumber, it should be about 160 degrees. The temperature of the solution is maintained by live or exhaust steam pipes coiled at the bottom of the vat.

The dipping vat should be cleaned out not less than once a week, and the solution should be kept free from sawdust and sap as far as practicable.

The illustration shows working plans for erecting a suitable vat, which may be made of concrete, wood or metal—all depending upon the mill operator's taste and desire for economy. A wooden or concrete vat is made at the mill with local labor.

A feature upon which too much emphasis cannot be placed is the necessity of keeping the solution at the proper strength. Five pounds of Eagle-Thistle brand pure bicarbonate of soda added to fifty gallons of water will give a one degree solution on a No. 1 Beaume Hydrometer, and for every five pounds of soda additional added to fifty gallons of water the Hydrometer will register one additional degree. Consequently, a solution made from twenty-five pounds of soda to fifty gallons of water will register five degrees; thirty pounds of soda to fifty gallons of water six degrees, etc.

Another feature which requires special attention is the proper stacking of the stock on the yard to dry. It should be stacked so as to allow the freest circulation of air possible. This is a matter of the utmost importance to the mill that desires maximum results in preventing sapstain with the soda-dip process.

The soda treatment is said to be especially desirable for export stock. Where formerly considerable loss was entailed by damage during ocean transit, many exporters have found that damage claims have ceased since the adoption of the soda-dip process. As conditions in the hold of a ship are particularly favorable for mildew, untreated stock is in great danger of sapstain. Under the soda-dip process the risk is removed, because the chemical action of the soda permanently neutralizes the sap acid in the lumber, thus removing danger of fermentation, providing the stock has been allowed to dry out thoroughly on the yard before shipping.

In the circular issued some time ago by the Forest Service, the government gives its sanction to the soda treatment, proclaiming it to be the most practicable preventative of sapstaining. If operated by machinery, it is estimated that the cost of soda treatment is from about five to eight cents per thousand feet board measure. A large mill operator in one of the southern states, who has for several years kept a careful record on this point, finds the cost to average about five cents per thousand feet.

The development of the soda-dip process has moved rapidly since its inception several years ago. Particular attention has been given to the matter of economically and quickly handling the lumber at the vat. Concerns selling soda for lumber dipping have gone fully into the subject and one of these, the Mathieson Alkali Works of Saltville, Va., is responsible for the design shown in this connection. This arrangement has evidently proven itself of great practical benefit in the soda-dipping process.

It is the man that uses the saws who ought to know something of their quality, so why not consult him as well as the price when it is time to buy new ones?

* * *

One of the good things that comes with the higher value of lumber is that the buyers will shed and care for it better, and even the millmen should be stimulated to do better piling.

* * *

Not only is the fine face veneer business growing steadily in volume each year, but the plain built-up lumber business is doing some husky growing, too. Examine drawer bottoms, furniture backs and big packing box panels for evidence.

* * *

Oak stave making and sawmilling ought to go together to make a proper clean-up of stumpage, but there is so much rivalry between them for the best oak timber that they will seldom stand to be hitched in double harness.

* * *

It is very likely that the scarcity of timber is the only thing that keeps the sawmill machinery men from having more business than they can take care of about now, and even as it is they are probably busier than they have been for a good many years.

* * *

The way some of the wood finishers abuse the neutral color of some of our woods to get new effects is about as near to a sin as the way our better halves abuse nature to be in style.

* * *

Whenever a crook gets into any kind of business he makes it harder for the others in the business as well as making a nuisance of himself, and in this the lumber business is no exception.

The Ripsaw in the Lumber Yard

The wholesale lumber yard is not generally looked upon as a member of the woodworking trade, because its principal business is the assortment and rehandling of the product of the sawmills. It stands as a sort of stopping-place between the mill and the factory, and its chief function is that of the jobber, who draws supplies from many sources and thus is constantly in a position to serve the consumer with the particular item best suited to his needs.

But while the wholesaler of lumber is not primarily a woodworker, he is getting into that category more and more. In fact, the number of yards in which manufacturing operations are being indulged in is rapidly increasing, and it is by no means infrequent to find concerns, which originally did nothing but rehandle the rough stock, now putting it through one or more manufacturing processes in order to make it better suited to the requirements of the market or of some particular consumer.

The ripsaw plays an important part in this direction. Many lumbermen in the hardwood field believe that they can make money out of a ripsaw simply by using it to cut up stock which is low-grade because of defects, but which can be remanufactured into boards containing so much clear lumber that the grade is raised materially. That is to say, a board might have a sufficient number of standard defects to be a common; but by cutting it up so as to get clear faces for the smaller pieces, the grade on the latter is raised, allowing the defects to be concentrated on the remaining common plank.

It is true that there is a sacrifice here of width, in order to raise the grade; and consequently there might be said to be something of an economic loss. On the other hand, however, this service is performed for the sake of the consumer who needs clear lumber, and who consequently buys upper grade stock. If the change in grade were not performed in the wholesaler's yard, the board would not reach the factory of the consumer who requires firsts and seconds; and by making a good board out of a common one, the wholesaler-manufacturer has helped both himself and the consumer.

It is of course true also that the sawmill man nowadays endeavors to increase the value of his product by edging and trimming. The old days when a board was allowed to go out with the bark still on the outer edge, or the grade lowered by a bad place in the center of the plank, has passed, and the prominent defects are cut out and better lumber assured right at the mill. The sawmill man not only makes it possible for his lumber to look better and sell better, but he also relieves the trade of paying transportation charges on material that is certain to be waste. The only question is whether the waste will be cut out at the mill or the factory; and there seems to be little doubt that the mill is the proper place to do it.

This idea, therefore, is likewise responsible for the tendency of the wholesaler to carry forward the work started at the sawmill. As indicated, only the prominent defects are attended to there, and the finer points, which are appreciated only in connection with a close study of the rules for grading lumber, are left for the yard man to work out. That they can be worked out profitably is shown by the fact that a certain lumberman recently reported that on a single car of walnut he had made $50 through remanufacturing in this way. In the case of this particular wood, it is true that the difference in value between the common and upper grades is so great that a bigger opportunity is offered for the man with a ripsaw and a good eye for grading opportunities than in the case of most other woods. It is extremely doubtful, for instance, whether much is to be gained through the remanufacture of plain oak along this line; while poplar lends itself pretty well to the operation.

Ordinarily where ripping is done for the purpose of improving the grade of lumber, the wholesaler operates his saw by means of a motor. Naturally it would not pay to put in a steam plant for the purpose of generating power merely for one or two machines, and hence the motor fits into the scheme of things admirably. Central station service is of course used, although the country dealer, who desires to apply the principle of conservation in connection with improving the character of his stock, could of course install a gasoline engine and either drive his saw directly from it, or interpose a dynamo and get electric current, which would also do for lighting his shop.

The character of work referred to is really a part of the general plan of dimension stock manufacture which has made such a deep impression on the woodworking trade. The number of dimension manufacturers has been increasing steadily, and while many of them are millmen, who cut the lumber to size right after it has come from the log, many others are wholesalers of the kind indicated, who have put in machinery at their yard and remanufacture the lumber there according to the desires of their customers.

That the dimension idea is growing, both among the lumbermen and the members of the woodworking industries, is indicated in a score of ways. The writer recently was in conversation with a former superintendent of a large plant manufacturing musical instruments. He had left this concern, however, to go into business for himself, and was then equipping his plant. He made the significant statement that instead of paying freight on random widths and lengths in his hardwood lumber, much of which he would lose in cutting up, he intended to buy all dimension stock, as nearly as possible, and thus save much of his machine work as well as waste and transportation charges. He is carrying out



SPECIAL TRAIN LEAVING CAIRO, ILL., APRIL 28, 1913, VIA BIG FOUR, CONTAINING FORTY CARS OF 2-INCH TO 6-INCH PLAIN OAK L

this plan, and reports that he has scored a substantial saving by means of it. If the wholesale lumberman or sawmill man had not equipped themselves with the proper machinery to provide this kind of lumber, the user, the factory man, would have been compelled to continue along lines which he realized were incorrect.

The owner of a ripsaw at a wholesale yard, like any other dimension manufacturer, must shoulder a big charge for waste. In other words, in order for his plan to be successful, his increased values, secured through the improvement of the grade, must be sufficient to absorb not only handling charges, in and out of the shop, manufacturing expense and overhead on his plant and equipment, but also the loss in waste. This runs anywhere from fifteen to thirty per cent, and is consequently a big item. A sawyer who cuts up stock without discrimination, or a lumberman whose inspectors or yard foreman were not sufficiently knowing in their choice of boards to be ripped, would soon pile up such a big expense account, with such a small corresponding increment in lumber values, as to make the experiment a particularly disastrous one.

In this case, of course, the lumberman is not really cutting dimension stock, though he is improving the character of his lumber in much the same manner as that used by the concern which is cutting lumber to the sizes required by specific consumers. Hence offal that in the dimension mill might be worked up into stock suitable for certain users would be a total loss at the wholesale yard which was running its lumber through the saw with only one object in view—reducing the number of defects to the piece and thus raising the grade of the lumber.

All these possibilities have to be taken into account by the yard man who enters the manufacturing class along the lines noted. A good many who have considered the project believe that the plan is not worth while, but so many others have put in equipment and added to it from time to time that it is at least a fair assumption that under proper conditions and with skillful handling, the wholesaler-woodworker can at least make his investment in machinery earn its six per cent salt.

The yard man is also providing equipment in a good many cases for surfacing work. It is really remarkable how many calls there are for stock that is dressed on one side. Small factories often ask for this character of lumber, and there are other consumers who can use lumber finished on one side and consequently can relieve themselves of the necessity of having to put in planers on their own account. This is particularly true of small woodworking concerns which do not handle a great volume of work, and which consequently do not feel like investing in expensive equipment which may be needed only semi-occasionally.

As suggested, the idea in the lumber and woodworking trades seems to be at present to do all that can be done profitably before the lumber gets to the factory. If, as the possibilities seem to indicate, the lumberman finally reaches the point where he delivers lumber dried, cut to size and surfaced, all the factory man will have to do will be to supply the cabinet-workers and the finishers. He will, in fact, cease to be a woodworker in large measure, and come to be a wood user only.

Imports and Exports

The imports of wood and the manufactures of wood into the United States for March, 1913, showed a total value of $3,808,116. A total value of similar imports for March, 1912, was $2,886,312. Of this the value of mahogany imported was $369,907. The cedar import was valued at $48,387. Pulpwood to the value of $443,027 was brought in during the month, while wood pulp to the value of $1,268,567 was imported. Exports during the same month totaled in value $8,730,658, as against $7,715,820 in March, 1912. Hewed and sawed timber aggregating in value $667,284 was exported during the month. Yellow pine led in total of export value with $2,136,800, oak being second with a value of $820,239.

Michigan Hardwood Cut

Comparison of the estimated and the actual cut of members of the Michigan Hardwood Manufacturers' Association is embodied in a report recently coming from Secretary Knox. On Jan. 1, 1913, fifty-eight members estimated that their winter's cut would total 402,526,000 feet of hardwoods. The actual cut reported by these members April 1 was 391,019,000. Maple showed the largest individual cut; beech, second; birch, third; then followed basswood, soft elm, ash and rock elm.

Car Surpluses and Shortages

According to the report of the American Railway Association, dated May 7, the total surplus of freight cars on May 1, 1913, was 53,977. The total surplus on April 15 was 70,715. It is interesting to note that a year ago the total surplus on May 9 was 136,776. The total shortage May 1, 1913, was 14,178, and on April 15 was 13,217. A year ago, specifically May 9, 1912, there was a shortage of 6,078 cars. These figures offer an interesting commentary on the condition of shipments throughout the country. It will be seen that there was a noticeable decrease in the surplus of cars from April 15 to the first of May, while the shortage increased materially during the same period. This would certainly indicate increased shipping activity throughout the country.

The most striking feature is seen in a comparison of figures for May, 1912, and May, 1913. An excess of surplus is seen in May of last year against a very moderate surplus in May of this year. The shortage the ninth of May, 1912, was practically negligible, while on May 1, 1913, it was fairly large. This should be a further indication of the increased industrial activities as compared to this time last year.



TWO DAYS AT THE YARDS OF C. C. SHAFER. A RECORD IN SINGLE SHIPMENTS OF HARDWOOD FROM THAT POINT. (See page 38.)

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 443—Has Oak Wagon Stock

Canton, Miss., May 2.—Editor HARDWOOD RECORD: Will you kindly give me the names of a few buyers of red and white oak wagon and buggy stock, such as poles, bolsters, etc.

Thanking you. ——————.

This party has been supplied with a list of possible buyers of the material he has to offer, and any others can have the address on application.—EDITOR.

B 444—Some Queries on Dryness

Pittsburgh, Pa., Apr. 30.—Editor HARDWOOD RECORD: We use hickory and maple and find it necessary in some cases to withdraw as much moisture as possible and are anxious to learn the experience of other parties in handling such stock. We give below a list of questions, regarding which we would appreciate your advice:

1. What percentage of moisture will kiln-dried maple plank, 10/4", 12/4", 14/4" and 16/4", stand so as to guarantee it against warping? Is there any reason to believe that material having less than 5% moisture in it would warp after working?

2. Is there any possible chance of a 14" disc made from 8/4" maple that has less than 2½% of moisture in it, warping after it has four holes of approximately 2" diameter bored equal distance apart and midway between centre and circumference; or if so, to what extent must kiln-drying be carried to guarantee this? Also, what is the life of the material after it has been reduced to 2½%?

3. What is the life of 8/4" hickory cut into handles approximately 1¾" diameter, anywhere from 8 to 24" long, that does not contain over 8% of moisture?

4. Does not hickory become brashy after being reduced to 8%? ——————.

It is not possible to answer any one of the above four questions with plain "yes" or "no." Much depends on circumstances. It is difficult to see how any permanent advantage can result from reducing the moisture contents of wood below about eight per cent and then exposing the wood to atmospheric conditions. It will absorb from the air enough moisture to raise the contents to eight per cent or more. In fact, about twelve per cent is not far from the average. After this preliminary statement, the questions may be taken up seriatim.

1. There can be no guarantee against warping if the planks are so situated that one side will absorb or part with moisture faster than the other. It is not the degree of moisture in wood that causes warping, but the fact that one part of the wood contains more water than another part. The result, however, may be somewhat modified by variations in structure of different parts of the same piece. Wood with less than five per cent of moisture is not proof against warping. It may warp while absorbing water from the air, or while parting with some of it afterwards.

2. The answer to the second question is practically the same as the answer to the first. It refers to a specific piece of wood, however, and the disc might be placed where temperature and moisture conditions are equitable, and warping would not occur. In an ordinary room the wood will, within the course of a few months at most, contain from eight to sixteen per cent of moisture, no matter how dry it is when it is placed in the room.

It is not possible to say what the life of the material will be after it has been reduced to 2½ per cent of moisture. If it could be kept that dry it would never decay, but it might wear out, or insects might speedily destroy it. Since that degree of dryness cannot be maintained in practice, the question is purely theoretical.

3. An unconditional answer to the third question is impossible. The life of hickory, in this instance, evidently refers to the period of service it will give. There is no limit except such as is imposed by conditions exterior to the wood itself. It is simply a matter of experience as to how long handles will last, supposing, of course, that they are not attacked by decay or bored by bettles. In use the wood cannot be kept down to eight per cent of moisture.

4. Available reports of timber engineers do not warrant the statement that hickory becomes brashy after its moisture content has been reduced to eight per cent, yet such may be the case. It is pretty generally true of timber which has been reduced to a high state of dryness that, if it subsequently becomes saturated with moisture, it loses some of its original strength. That may occur in the case of the hickory referred to in question 4.

Although thousands of tests of timber have been made by engineers in laboratories, and almost every possible field has been covered, there is nevertheless plenty of room for practical wood users to throw light on many a difficult problem. Without questioning in any way the exhaustive research work that has been done in the laboratory, the fact remains that it is often the practical man, face to face with real problems, who hits upon the valuable discovery.

B 445—Wants Wood Specimens for Experimental Purposes

Chicopee, Mass., May 1.—Editor HARDWOOD RECORD: We are desirous of getting one or two pieces each, 3½" or 4" square, of the following woods: Black willow, coat willow, cotton gum or tupelo, and one or two pieces 2x2x12" long of Oregon maple, mountain laurel or spoonwood. We would be very much pleased if you could put us in touch with sources of supply for these as we wish to secure these samples for experimental purposes. ——————.

The above letter is from a leading manufacturer of sporting goods. For all of these woods that grow in commercial quantities we have suggested sources of probable supply, and have further advised that coat willow and water gum are of so meager and scattering growth that they are not obtainable in commercial quantities.—EDITOR.

B 446—Weight of Maple Logs

Merrill, Wis., May 5.—Editor HARDWOOD RECORD: Will you kindly inform us as to the average weight of hard maple logs per thousand feet? We buy a great many maple logs and the shipping weights which the railroad company has put on them vary so widely that it seems to us something must be wrong. These weights show differences varying from 12,700 to 16,400 pounds on the same quantities of like logs.

Would also be glad to have you give us a list of the maple flooring manufacturers in Michigan and Wisconsin as we are seeking certain sized waste that we might be able to use in our line of manufacture. ——————.

The foregoing letter is from a leading handle and dowel manufacturing house which has been advised of the best source of information to secure approximate weights of maple logs. The writer has also been supplied with a list of the maple flooring manufacturers in the states named.—EDITOR.

B 447—The Meaning of "FAS"

Toronto, Can., May 5.—Editor HARDWOOD RECORD: Will you be good enough to tell us just what the term "FAS" means as applied to lumber, and very much oblige? —— - MANUFACTURING CO., LTD.

The above writer has been advised that "FAS" is a term signifying "firsts and seconds," which was coined by F. F. Fee, the oak manufacturer of Little Rock, Ark., and was officially adopted by the Hardwood Manufacturers' Association a few years ago to express the term in abbreviated form.—EDITOR.

B 448—An Analysis of Okume Wood

Louisville, Ky., Apr. 21.—Editor HARDWOOD RECORD: We are sending you under seperate cover a specimen of okoume wood from Cape Lopez, French Congo, on the west coast of Africa. Will you kindly analyze this and let us know its properties as far as can be determined from the sample? ——————.

The above letter is from a leading foreign woods manufacturing institution which has been advised that the usual nomenclature of this wood is "okume." It has been supplied with the following physical analysis:

This wood belongs to the *Bursera* genus, but the exact species is uncertain. It is frequently called African cedar in commerce, and bears remarkable resemblance to Spanish cedar (*cedrela odorata*) of which cigar boxes are made. It is soft, brittle and slightly fragrant. Under the microscope it shows scrattering, large open pores which run straight. When the wood is cut lengthwise, the pores produce channels which are very similar to those of Spanish cedar. The medullary rays are numerous but too small to be

seen with the naked eye. When quarter-sawed wood is polished smooth the rays impart a soft, silvery luster; but the figure is very tame.

Compared with African mahogany, (*Khaya senegalensis*) okume is found to be lighter in weight, lighter in color, softer, with larger pores, and with medullary rays much the same in size and number, but lighter in color than the rays of mahogany. The wood is weaker than mahogany.

No test was made of the staining and finishing properties but from the open nature of the pores it seems probable that okume would respond readily to changes in color made by stains and fillers. It is doubtful if it could be successfully substituted for mahogany, but it might prove satisfactory for cigar boxes.—EDITOR.

B 449—Seeks Kraetzer-Cured Lumber

Detroit, Mich., May 7.—Editor HARDWOOD RECORD: Will you kindly give us a list of manufacturers of sap gum who can furnish the same in straight first and second grade, treated by the Kraetzer process?

——— BODY COMPANY.

The foregoing is from the leading automobile body manufacturing concern of the United States, which has been supplied with a list of the leading producers of Kraetzer-cured lumber as follows:

Lamb-Fish Lumber Company, Charleston, Miss.
Bennett Hardwood Lumber Company, Memphis, Tenn.
Russe & Burgess, Inc., Memphis, Tenn.
Santee River Cypress Lumber Company, Ferguson, S. C.
Norman Lumber Company, Holly Ridge, La.
Saline River Hardwood Company, Pine Bluff, Ark.
Himmelberger-Harrison Lumber Company, Morehouse, Mo.

EDITOR.

News Miscellany

Meeting of Michigan Hardwood Association

The spring meeting of the Michigan Hardwood Manufacturers' Association, held at Detroit, Apr. 25, resulted in a great deal of actual accomplishment. The treasurer's report showed a balance on hand in the general fund of $6,858.15, and in the forest fire protective fund $1,631.71.

Henry Ballou, chairman of the committee on railroads, read an excellent report, discussion of which brought out many opinions regarding locomotive screens, kinds of coal, inspection, etc.

Chairman Day of the grading rules committee called attention to proposed changes in inspection rules of the National Hardwood Lumber Association and urged every member to attend the annual meeting in Chicago on June 5 and 6, emphasizing the importance of their votes.

Chairman Bigelow of the forest fire protective committee stated that an automobile had been purchased for the chief fire warden, making the patrol service of greater value to the members.

Bruce Odell, chairman of the market conditions committee, read a report which was well received. He made some remarks on the tie business of Michigan and considered it of sufficient importance to warrant every manufacturer making a trip to some mill where ties are manufactured. Mr. Odell reported the demand excellent, in fact unprecedented, while supply of dry stock is low.

After a talk by J. E. Rhodes, secretary of the National Lumber Manufacturers' Association, it was voted that membership to that association be continued. After talks by R. K. Orr, deputy insurance commissioner of Michigan, Secretary R. S. Kellogg of the Northern Hemlock and Hardwood Manufacturers' Association, and E. H. Defebaugh, the meeting adjourned.

Cincinnati Club Elects Officers

A most spirited but friendly election was held by the Cincinnati Lumbermen's Club May 5, an entirely new set of officers with one exception, being elected to control the destinies of the club for the ensuing year. The one exception is the re-election of J. A. Bolser of the Blackburn & Bolser Company as secretary, this being his fourth consecutive term. He was the only one on the regular ticket to win out. A feature of the election was the close contests, except in the race for treasurer, Geo. Hand of the Bayou Land & Lumber Company easily defeating Emil Thoman, after Mr. Thoman stated that he had withdrawn but was not permitted to do so and requested the members to vote for his opponent. The race for president between W. E. DeLaney of the Kentucky Lumber Company and C. C. Hagemeyer of the Tennessee Lumber & Coal Company, resulted in a tie vote, as was also the case in the race for second vice-president between H. A. Hollowell of H. A. Hollowell & Co. and J. C. Rash of the Shawnee Lumber Company. The constitution of the club in case of a tie calls for a selection by lot, and in the drawing that immediately followed the announcement of results, the lot was cast by the judges of election appointed by President Shiels. It was found that C. C. Hagemeyer and J. C. Rash had been the lucky ones for president and second vice-president, respectively. The other officers declared elected were Ralph McCracken, sales manager of the Kentucky Lumber Company for first vice-president, who defeated J. S. Zoller of the Talbert-Zoller Lumber and Veneer Company.

The evening opened with the regular dinner, following which the minutes of the previous meeting were read and approved. A number of communications were then read and disposed of. The annual report of Treasurer R. L. Gilbert showed a healthy balance on the right side of the ledger. The "square deal" policy of the club was again in evidence when the arbitration committee reported a decision in a case between two of the members, which was readily accepted by both parties of the controversy. Two other cases are in the hands of the committee, but have not yet been decided.

At the last monthly meeting a committee was appointed to distribute a fund of $775.00, of which $315.00 was sent to the club by the New York Lumber Trade Association, the balance being a club donation aside from the many individual donations from all Cincinnati lumbermen, for the benefit of the flood sufferers in the many flooded sections in this vicinity. Replies were received and read from each of the places where money had been sent.

The question of having the annual club outing in June was taken up, and the entertainment committee was instructed to arrange for a "stag party" at some suitable place during the month of June.

Trade Press Association Will Meet

The last issue of HARDWOOD RECORD contained a reference to the coming meeting of the Associated Advertising Clubs of America. A similar organization, one which is probably more closely allied to the average industrial business, is the Federation of Trade Press Associations. This organization will hold its eighth annual meeting in September at the Hotel Astor, New York. It is a well-known fact that those engaged in industrial occupations who are as a general thing most opposed to trade paper work and trade paper advertising, are the ones who do not read their papers or in the case of advertising, do not follow the suggestions of the papers in which they carry publicity. The design of this meeting is the promulgation of ideas for business promotion through trade press efficiency, and unquestionably managers of industrial plants in every line would get valuable as well as interesting information by attending. Many of the leading editors, business managers, buyers and sellers of advertising, and authorities on modern merchandising will take part. There will also be addresses by representative business and professional men in other lines. On the whole, it is hard to conceive of any other industry whose members could more directly profit by attendance at this meeting than the lumber business.

National Association of Manufacturers to Meet at Detroit

An interesting indication of the desire on the part of manufacturers for a better knowledge of industrial conditions in other commodities than their own is given in the action of the National Association of Manufacturers in holding its annual convention this year, May 19, 20 and 21, at Detroit, Mich. This organization, composed of 4,000 of the largest firms in the country, has in recent years held its annual sessions at New York. The proceedings of the meeting this year will be of exceedingly great interest to manufacturers and employers everywhere on account of the change in the national administration, the application of a new tariff schedule, the legislative enactments designed for the regulation of business, the general economic unrest, and the ever sharpening aspects of the labor situation. The notable features of the convention will be addresses and committee reports on such subjects as accident prevention, compensation, industrial education, export trade, interstate commerce, federal incorporation, etc.

Two Coming Meetings of Interest

The official invitation of the National Lumber Manufacturers' Association for its eleventh annual meeting to be held at the Hotel Baltimore, Kansas City, Mo., on Tuesday and Wednesday, June 3 and 4, has been issued. The association is planning an extensive program which will present topics of distinct interest to all associated members and individuals. The National Lumber Manufacturers' Association now has eleven affiliated organizations, namely, the Northern Pine Manufacturers' Association, the Northern Hemlock and Hardwood Manufacturers' Association, the Michigan Hardwood Manufacturers' Association, the Hardwood Manufacturers' Association of the United States, the North Carolina Pine Association, the Georgia-Florida Sawmill Association, the Yellow Pine Manufacturers' Association, the Southern Cypress Manufacturers' Association, the Western Pine Manufacturers' Association, the West Coast Lumber Manufacturers' Association, and the Pacific Coast Sugar and White Pine Manufacturers' Association.

Present officers are E. G. Griggs, president, R. H. Vansant, J. V. Conrad and R. H. Dowman, vice-presidents, J. A. Freeman, treasurer, J. E. Rhodes, secretary. The office of the secretary is now at 1621 Otis building, Chicago.

The second meeting, which will be held at the Hotel Sherman, Chicago, on June 5 and 6, is that of the National Hardwood Lumber Association. These meetings are always widely attended, and in view of the fact that since its annual meeting a year ago almost a hundred new members have been taken in, it is believed that the attendance at the pending meeting

will be record breaking. The program includes a vast amount of discussion on various important topics. The discussions of the proposed changes in grading rules will receive the greatest attention. Various changes of fundamental importance will be suggested to the membership for their consideration and vote. Among these will be changes proposed by northern hardwood manufacturers, while it is reported also that a southern manufacturer will recommend the consideration of a much more radical change.

A Remarkable Shipment of Hardwood

On pages 34 and 35 of this issue is shown a reproduction of a photograph of the largest shipment of hardwood lumber ever sent out of Cairo, Ill., at one time. On Apr. 27 Cyrus C. Shafer of South Bend shipped this trainload of 600,000 feet of from 2" to 6" plain oak lumber from his Cairo yard in anticipation of flooded conditions. The train went out over the Big Four and was composed of forty cars. It was carried as a solid train to Chicago, where it was broken up and diverted to the respective customers of that concern. All this material was loaded in two days, and established a record for hardwood shipments from that place.

Smoker St. Louis Lumbermen

The Lumbermen's Club held a smoker at the Washington hotel on the evening of Apr. 30, which was an Irish affair. Dr. Herman Von Schrenck, the guest of honor, gave a technical address. P. F. Cook also spoke to the audience. The program was printed in green and the menu was made up of Irish dishes.

Several new members were elected to membership. A resolution, making eligible to membership persons living in St. Louis county, was passed. A resolution increasing the number of each committee to five was read and will be voted on at the next meeting. O. A. Pier was elected secretary to take the place of J. B. Kessler, who had resigned to go to the Ozarks to farm. Resolutions favoring the continuance of the Commerce Court and also one regretting deeply the resignation of former Secretary Kessler were passed.

Philadelphia Exchange Meeting

The Lumbermen's Exchange of Philadelphia held its first monthly meeting under its newly elected officers, preceded by the usual luncheon, on May 1, President Benjamin Stoker in the chair. At this meeting Stroud & Wilgus were elected to membership. J. Randall Williams, Jr., chairman of the Forestry Committee, moved that in connection with exhibit to be made by the exchange at the Pennsylvania State Forestry Exhibition at Horticultural Hall, from May 19 to 24, a booklet giving the names of the wholesalers, retailers and affiliated concerns, which are members of the exchange, be printed and distributed during the exhibition.

It was also resolved at this meeting that as a trial the exchange hold its next meeting in the evening, which change, it is believed, will insure a larger attendance, as the merchants say they can not well spare the time which is devoted to the meeting during the day.

A communication from the Atlantic Deeper Waterways Association, requesting that delegates be sent to the sixth annual convention, to be held at Jacksonville, Fla., from Nov. 18 to 21, was received. It was decided that the exchange send representatives as requested.

A vote expressing approval of the passage of the Auxiliary Forest Reserve bills in the Pennsylvania legislature was passed in a resolution, which is to be forwarded to Charles A. Snyder, chairman judiciary general committee of the Senate.

A very elaborate and interesting report of the committee representing the exchange at the seventeenth annual meeting of the American Academy of Political and Social Science was read by W. H. Wyatt, chairman, after which the meeting adjourned at 3 p. m.

The following committees have been appointed for 1913:

LEGISLATION.—Thomas B. Hammer, chairman; Franklin A. Smith, Jr., W. Henry Smedley, Howard Ketcham, J. Dickinson Este.

RAILROADS AND TRANSPORTATION.—Horace A. Reeves, Jr., chairman: Frederick S. Underhill, Paul R. Weitzel, Charles H. Wisler, J. Elmer Troth.

OFFICE AND ENTERTAINMENT.—George A. Howes, chairman; George Rodgmen, Paul P. Pearson, J. Edward Smith, W. H. Wyatt.

MEMBERSHIP.—Herbert P. Robinson, chairman; Charles L. Betts, Fisher Dalrymple, Charles M. Chesnut, Richard C. Esenwein.

CREDIT BUREAU.—Amos Y. Lesher, chairman; Joseph J. Arbelo, James A. Richardson, Charles M. Strickler, J. Zell Tucker.

BY-LAWS AND RULES.—William C. MacBride, chairman; Joseph W. Janney, John J. Little.

FINANCE.—J. Randall Williams, chairman; Edwin B. Newcomer, Robert B. Rayner.

ARBITRATION.—James A. Richardson, chairman; Samuel Roberts, Samuel H. Shearer.

Itinerary Arkansas Lumbermen's Trip

During the week beginning May 19 the Lumbermen's Club of Arkansas will tour the state in a private train, visiting a number of Arkansas' leading mills. The party on this trip will be composed of about 120 lumber manufacturers, accompanied by some newspaper men and railroad traffic officials. The trip will be of great value to the lumbermen in that it will provide them with the opportunity to visit the various lumber manufacturing industries of the state where conditions may be studied and ideas of the best and most progressive methods may be interchanged. This tour will also afford opportunities for discussing and formulating plans whereby the Arkansas cut-over timberlands may be disposed of to the best advantage.

At the regular monthly meeting of the club held in the Marion hotel at Little Rock, on Mar. 8, J. F. McIntyre, president of the club, appointed a committee to make all arrangements for the trip. That committee has, working in conjunction with the railroad traffic officials, perfected the itinerary, and made all arrangements for the tour. The committee has recently issued the following letter setting out the points to be visited and the general plans for the trip:

Below is a general outline of the trip to be made by the Arkansas Lumbermen's Club:

May 19—Leave Little Rock 7:30 a. m. via St. L. I. M. & S. Ry. to Walnut Ridge, returning to Hoxie, thence to Nettleton via Frisco, thence Paragould via the St. L. I. M. & S., thence to Blytheville, via P. S. E., thence Memphis via Frisco, arriving at latter point at 8:30 p. m., making stops at intermediate points.

May 20—Leave Memphis 5:00 a. m. via Rock Island to Forrest City, thence Clarendon via St. L. I. M. & S., thence Pine Bluff via Cotton Belt, thence Dermott via St. L. I. M. & S., arriving at latter point at 7:45 p. m., stopping at intermediate points.

May 21—Leave Dermott at 8:00 a. m. via St. L. I. M. & S. to Crossett, thence Bastrop via A. L. & G., thence Eldorado via the St. L. I. M. & S., thence Fordyce via Rock Island, arriving at latter at 8:15 p. m., stopping at intermediate points.

May 22—Leave Fordyce 7:30 a. m. via Cotton Belt, stopping at intermediate points, thence to Texarkana, thence to Hope and Prescott, arriving at the Highlands Orchard at 9:00 p. m.

May 23—Leave Highlands via P. & N. W., thence to Murfreesboro via M. D. & G., thence to Ashdown via M. D. & G., thence to Ft. Smith via Kansas City Southern, arriving at latter point at 5:30 p. m. remaining until 11:45 p. m., when we leave for Farrell via St. L. I. M. & S., making intermediate stops.

May 24—Leave Farrell 8:00 a. m. via St. L. I. M. & S., to Walco, returning to Malvern, thence Rock Island to Hot Springs, thence Rock Island to Little Rock, making intermediate stops.

In addition to the above there will be several side trips, taking in the lumber towns not located on the direct route.

Many interesting features of the trip are being arranged by the committee, such as an evening at Memphis with the lumbermen of that city, an evening at Dermott and Warren, visits to the largest peach orchards in the world at Highlands and Horatio; seeing the woodworking plants at Fort Smith; visit at Hot Springs, the diamond mines at Murfreesboro and Bauxite mines at Bauxite, Arkansas.

Cost of railroad fare for entire trip	$40
Cost of lower berth for six days	15
Cost of upper berth for six days	10

In sending your application for reservation state number of lower or upper berths you desire and make check payable to C. A. Buchner, treasurer, mailing same with application blank filled out to R. R. McIntyre, Pine Bluff, Ark.

Dining car meals will be served a la carte and paid for as taken.

CARL J. BAER, Chairman, Little Rock, Ark.
R. R. McINTYRE, Secretary, Pine Bluff, Ark.
C. A. BUCHNER, Treasurer, Millville, Ark.

Memphis Lumbermen in Semi-Annual Meeting

At the meeting of the Lumbermen's Club of Memphis, held at the Hotel Gayoso, May 3, F. E. Stonebraker, Memphis representative of Amedee C. Franck & Co., Antwerp, Belgium, was elected to serve as director from the Lumbermen's Club in the Business Men's Club for the ensuing year. The recent affiliation agreement of the Business Men's Club provides for such a representative on the official board. The position was first tendered to J. D. Allen of the I. M. Darnell Sons' Company, who was candidate for director in the open election held at the Business Men's Club the previous week. He was defeated at that time but by a very small margin, and, although the Lumbermen's Club offered him the position of director by instructing the secretary to cast a unanimous vote for him, he declined the honor.

W. B. Morgan, secretary-treasurer of the Anderson-Tully Company, who has recently been elected chairman of the National Classification Committee on lumber and wooden box interests, addressed the club. He outlined the strenuous fight being made before the Interstate Commerce Commission at Chicago in the Pridham Box Case. He said that the manufacturers of fiber cases have used a very large sum of money and were making a strenuous effort to defeat the plans of the wooden box interests for equal rates on goods shipped in wooden and fiber cases. He said that the decision in this case meant millions of dollars to representatives of lumber and woodworking interests and the purpose of his address before the club was to ask for funds to help along with the defense of the latter. He said that the box people were probably more interested than the lumber manufacturers but that all were vitally concerned for the reason that an unfavorable decision would practically destroy the open market for the lower grades of lumber. He said that the railroads would not come out in the open and give testimony regarding breakage as between goods shipped in wooden and fiber cases, but that it was necessary in every instance to subpoena such railroad men as appeared in behalf of wooden box interests. He declared that this was very expensive and that a great deal of money was needed right away. On the conclusion of his address the club appointed a committee of three to solicit funds, composed of John W. McClure, S. M. Nickey and F. B. Robertson. Mr. Morgan indicated that he was leaving for Chicago immediately and that he would spend the remainder of the time between now and the closing of this case in the interest of the committee of which he is the head. He made a strenuous effort to secure a longer time in which to prepare evidence but said that the commission had refused to grant an extension beyond two

weeks. He believed that with proper financial backing it would be possible to present a very strong case.

James E. Starke of the law and insurance committee, said that he had been informed that two new bills had been introduced into the Tennessee legislature, covering the placing of lumber insurance with companies outside the state. He said that the new bills were more drastic than the old but that he had been assured by Mayor Crump of Memphis that there was no danger whatever that these bills would be passed at the present session.

John W. McClure, special representative of the Lumbermen's Club of Memphis at the weight hearing before the Interstate Commerce Commission at Washington, was ready to make his report but this was postponed until the next meeting. It shows that the best railroads of the country proved to the commission that it was possible to secure accurate weights on lumber and other freight although the cost was quite high. He also said that the methods of the Pennsylvania Company indicated that accurate weights could be obtained if cars were weighed on properly regulated scales at a speed of not exceeding three miles per hour. He pointed out that the experience of the Pennsylvania system showed that weighing cars uncoupled at both ends was out of the question, owing to the intolerable congestion at terminals that would result. He also said that the showing made by the Pennsylvania railroad forced most of the other roads to admit that they had been rather careless in arriving at correct weights. He said that these roads made an effort to impress the commission with their intention of correcting present conditions if that body would not adopt any rules or regulations that would hamper their conduct. Mr. McClure said that he had only about five minutes in which to address the commission but that during this brief period he urged upon that body the necessity for adopting rules and regulations because, judging from past experience, the railroads could not be depended upon to carry out their plans independently. He thought that the correction of present conditions would be very much accelerated by uniform rules and regulations, enforced by the commission in justice alike to shippers and carriers.

Otis A. Felger of the Memphis Band Mill Company was elected to active membership at this meeting.

Hearing on Log Rates in Wisconsin

The hearing on the complaint made on Feb. 3, 1913, by the Northern Hemlock and Hardwood Manufacturers' Association, regarding the change in rates on sawlogs made by the Chicago & Northwestern Railway Company, was held before Commissioner Halford Erickson of the Wisconsin Railroad Commission in Milwaukee on Apr. 24. The complaint stated "that the Chicago & Northwestern road proposed to demand and charge on and after Feb. 11, 1913, unjust and unreasonable freight rates on sawlogs in trainloads of twenty cars or more between points in Wisconsin, as published in the Chicago & Northwestern tariff, GFD, No. 1098A, and that such higher rates will work an undue hardship and will result disastrously to the lumber interests of Wisconsin."

The Northern Hemlock and Hardwood Manufacturers' Association presented convincing testimony that even under the present favorable market conditions, lumbermen cannot afford to bear the increased transportation charges on sawlogs destined to the mills, which the Chicago & Northwestern is trying to enforce. Seven witnesses testified for the association, showing that since the expiration of the trainload tariff on Feb. 11, 1913, rates on sawlogs shipped on the carload basis had advanced from seventy-five to one hundred per cent, and that the mills in most cases have been operating at a loss ever since. Every witness testified that he would be willing to accept the carload tariff, providing the rates were placed on a fair basis.

M. P. McCullough, secretary-treasurer of the Brooks & Ross Lumber Company of Schofield, Wis., the first witness called, testified that since the change in tariff had been made his company had experienced an advance in rates of eighty-six per cent on sawlogs shipped from Mercer to Schofield, a distance of 142 miles, and that the cost of getting logs to the mill had increased from $1.80 to $1.90 per thousand.

W. A. Holt of the Holt Lumber Company of Oconto, Wis., said that rates on logs shipped by his company from the Lakewood district to Oconto, a distance of about fifty-four miles, had increased seventy-five per cent since Feb. 11, 1913, while the cost per thousand feet of logs had increased materially.

H. B. Leavitt, Chicago, an official of the Oconto Company, having a mill at Oconto, Wis., testified that his concern secured most of its logs from the Lakewood district. He aroused much interest by his statement that the directors of his company have been considering the question of discontinuing its operations in Oconto, since the Chicago & Northwestern announced its tariff change on sawlogs.

W. C. Landon of the Barker & Stewart Lumber Company, Wausau, Wis., said that his company secures its logs over both the Chicago, Milwaukee & St. Paul and the Chicago & Northwestern roads. He called attention to the fact that the Barker & Stewart Lumber Company is regarded as one of the largest producers of hemlock in Wisconsin and that it saws annually at least 40,000,000 feet, but he said that unless satisfactory railroad rates can be secured his company would probably be forced to discontinue its sawing operations in Wausau.

W. A. Holt of the Holt Lumber Company again took the stand to say a few words about his company at times operating at a loss, showing how this would occur when the company was forced to cut burned hemlock in order to save it, even if the market were at a low stage. He reiterated his statement that the success of the lumber business in Wisconsin depends largely upon the rates offered by the railroads.

George A. Schroeder, who acted as council for the Northern Hemlock and Hardwood Manufacturers' Association, believes that a formal decision may be expected from the Wisconsin Railroad Commission within the next sixty days.

Building Operations for April

Official reports of building operations from sixty-four of the principal cities of the country, compiled by the American Contractor, Chicago, show for the month of April permits for the construction of buildings to the value of $78,188,540, as compared with $83,042,205. While this is a decrease of about six per cent, the showing is not as unfavorable as it appears, for in April last year there was unusual activity in New York City. Omitting the report from that city, there would be a gain. Thirty-eight cities show gains and only twenty-six comparative losses. The most notable gains are those of Baltimore, 112 per cent; Dallas, 140 per cent; Evansville, 115 per cent; Harrisburg, 218 per cent; Little Rock, 277 per cent; Nashville, 200 per cent; Shreveport, 127 per cent.

For the four months ending April, the showing is favorable, the building permits totaling $226,845,947, as against $224,647,323 for the corresponding period last year, a gain of 1 per cent. Details follow:

City.	April, 1913 Cost	April, 1912 Cost	Per Cent Gain	Per Cent Loss
Akron	$ 1,119,380	$ 704,635	59	..
Albany	480,100	904,635	..	47
Atlanta	427,185	1,135,396	..	62
Baltimore	1,626,014	766,508	112	..
Birmingham	296,235	197,690	50	..
Buffalo	1,097,000	848,000	29	..
Cedar Rapids	168,000	133,000	26	..
Chattanooga	117,900	192,575	..	39
Chicago	12,329,900	9,345,400	32	..
Cincinnati	693,205	947,485	..	21
Cleveland	1,880,065	1,806,859	4	..
Columbus	774,121	745,737	4	..
Dallas	1,209,835	502,970	140	..
Denver	242,300	651,850	..	63
Detroit	3,070,195	3,086,405	..	..
Duluth	280,345	172,728	62	..
Evansville	448,406	208,625	115	..
Fort Wayne	222,150	302,650	..	27
Grand Rapids	355,776	285,353	25	..
Harrisburg	185,025	58,240	218	..
Hartford	378,520	873,520	..	57
Indianapolis	1,531,060	1,332,230	15	..
Kansas City	1,265,745	1,304,760	..	3
Lincoln	623,085	165,240	277	..
Los Angeles	5,047,065	2,650,461	90	..
Louisville	510,690	712,010	..	28
Manchester	352,352	414,154	..	14
Memphis	285,929	224,454	4	..
Milwaukee	1,702,340	1,576,566	8	..
Minneapolis	1,424,360	2,148,455	..	34
Nashville	427,366	142,070	200	..
Newark	1,842,278	1,126,777	63	..
New Haven	403,135	659,580	..	39
New Orleans	251,734	324,827	..	22
Manhattan	7,470,358	15,438,826	..	52
Brooklyn	3,761,461	5,604,364	..	33
Bronx	2,892,281	4,125,741	..	30
New York	14,124,100	25,168,931	..	44
Norfolk	478,256	246,612	86	..
Oakland	652 490	742,788	..	12
Omaha	575,085	504,320	14	..
Paterson	149,785	241,536	..	38
Peoria	259,101	160,000	56	..
Philadelphia	3,689,615	4,503,385	..	18
Pittsburgh	1,057,762	1,009,792	5	..
Portland	2,887,885	2,305,936	3	..
Richmond	495,141	766,664	..	35
St. Joseph	200,127	145,850	37	..
St. Paul	926,150	869,799	6	..
St. Louis	1,586,006	2,416,240	..	34
Salt Lake City	277,151	192,350	44	..
San Antonio	156,155	152,477	2	..
San Francisco	3,152,020	1,916,659	64	..
Scranton	113,390	153,717	..	26
Seattle	840,595	1,235,230	..	32
Shreveport	156,907	69,217	127	..
South Bend	195,727	175,905	11	..
Spokane	198,363	193,910	2	..
Springfield	113,775	112,605	1	..
Tacoma	160,759	124,607	29	..
Toledo	885,315	558,450	59	..
Washington	1,162,656	1,049,714	11	..
Wilkes-Barre	132,369	97,389	36	..
Worcester	493,059	1,279,525	..	61
Total	$78,188,540	$83,042,205	..	6

Memphis Territory Back in Normal Running Order

The Mississippi river is well within its banks at Memphis and conditions affecting the output of hardwood lumber here have practically returned to normal. All of the plants in New South Memphis which were put out of commission by the high water are running on full time except where there is interference through lack of log supply. All of the plants in North Memphis which were closed down have likewise been able to resume, with the exception of one or two which are located on Henning island. The river is still falling at a rapid rate and switching facilities have likewise become normal. This means that logs can be delivered to the mills without delay and that all interference from high water has been eliminated in so far as the movement of lumber is concerned.

Conditions are rapidly returning to normal in the overflow territory in

the St. Francis basin. Some of the plants in the overflow area have not yet been able to resume, but it is said by those in position to know, that operations can be begun by practically all of them by the middle of the month.

Production has been very seriously interfered with during the past month, not only at Memphis but throughout the Memphis territory. This has resulted in quite a decrease in the amount of lumber available for the late spring and early summer business. This fact, coupled with the existence of a good demand, makes all of the owners and operators of lumber plants here and elsewhere in this section quite anxious to run on as large a scale as possible. As a result of this condition logging operations are being pushed with all possible speed and logs are being moved as rapidly as they can be handled.

Weather conditions recently have been very favorable for work in the woods and this has made exceedingly good progress, except in the limited area which has been covered with water. It is suggested that the old crop of timber has been pretty well moved and that receipts during the remainder of the year must come from timber cut during 1913. As a rule the mills have a larger stock of logs on hand or immediately available than they had following the flood conditions last year, and from this viewpoint the situation is much more satisfactory than at that time. There are some exceptions to the adequate timber supply, but these only serve to prove the general rule.

Ohio Veneer Company Incorporates

The Ohio Veneer Company has been well known in veneer circles for a long time as operating at Cincinnati, O. This concern produces a high-grade line of domestic and foreign veneer and cabinet lumber, but until recently has not incorporated. The incorporation does not change the style nor the persons interested in the company, who are Ferdinand J. Bosken, Joseph Bosken, William Bosken, J. W. Plummer and Frank Dorger. The capital stock at which the company is incorporated is $150,000.

Death of Daniel Simonds

Daniel Simonds of Fitchburg, Mass., president of the Simonds Manufacturing Company of that place, died at his summer home at Larchmont, Long Island, on Monday, May 5. The Simonds Manufacturing Company is a well-known large manufacturer of high-grade saws.

The death of Mr. Simonds takes away a man widely known in the industrial world. The Simonds Manufacturing Company was originally organized at West Fitchburg by the father of the recently deceased, Daniel Simonds was born at Fitchburg, Sept. 18, 1847. He attended public schools and business college, and on leaving the latter was employed by his father. In 1868 the Simonds Manufacturing Company was incorporated with a capital stock of $50,000 and the plant removed from West Fitchburg to its present location. The new company took over the business organized by Abel Simonds, and Daniel Simonds continued as an employe of the firm, holding various offices from time to time as the company grew. In the early eighties he was made superintendent and vice-president of the company and in 1888 succeeded George F. Simonds as president. In 1906 the company acquired four plants in Montreal and consolidated them with the local plant. From a modest beginning the business of the Simonds Manufacturing Company has grown to become one of the big industries of the country. During the year 1905 a magnificent new plant was constructed on the site of the old one at a cost of a quarter of a million dollars.

The development of the company in recent years is directly due to the ability and resource of Daniel Simonds. With him at its head the company branched out from Fitchburg, and plants were installed in Chicago and at Montreal as noted. The company also has works at Lockport, N. Y., branch houses in New York City, New Orleans, Portland, Seattle, San Francisco, London, and St. Johns and Toronto in Canada.

In addition to his constructive work tending to build up the Simonds organization, Daniel Simonds was directly responsible for an immense amount of work tending to benefit employes of the association. He introduced numerous features such as dining rooms and recreation rooms, which have helped to increase the loyalty and efficiency of Simonds workers.

Mr. Simonds was taken ill last July and in October went to a sanitarium in Dansville, N. Y. The diagnosis showed a complication of diseases. He returned from the sanitarium and again entered business, but about two months ago was again taken seriously ill at a New York hotel. He was moved from the hotel to his summer home at Larchmont and has been failing ever since. The funeral was held on Wednesday, May 7, from the Calvanistic Congregational Church at Fitchburg.

Joins Hayden & Westcott Lumber Company Forces

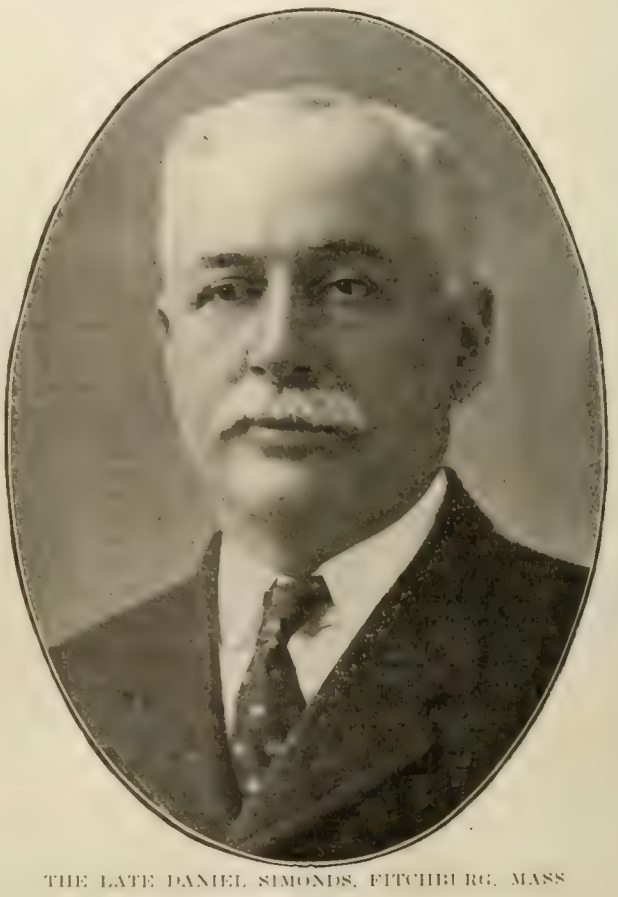
I. A. McElreath, formerly secretary of the Mercantile Lumber & Supply Company, Kansas City, Mo., and having his headquarters at Chicago, joined the forces of the Hayden & Wescott Lumber Company, Railway Exchange building, Chicago, on May 1, in the capacity of manager of the yellow pine and car lumber department. Mr. McElreath will have full charge of this character of business throughout the East and middle eastern territories. He has had a long experience in the yellow pine business, his recent connection having been of four years' duration. His advent in the lumber business dates back seventeen years. During this period he was worked practically only for two concerns, namely, the Seymour Lumber Company of Cordele, Ga., and the Mercantile Lumber & Supply Company.

Frank Tiffany Moves Office

Frank Tiffany of Leeds, England, and European representative of the National Lumber Exporters' Association, announces that in June he will remove his office to Leamington, which is on the main line between London and Liverpool. He states that this will enable him to deal more expeditiously with the growing calls upon his services. Leamington is only about an hour and a half run from London, with frequent train service.

Bossert Case Decided Favorably to Millmen

The Bossert case, which has been one of the foremost labor cases in the courts of the state, ended last week in a verdict for the lumber firm. Louis Bossert & Son, who conducted a non-union mill in Brooklyn, sued for an injunction restraining the Carpenters' Union from calling strikes on buildings in which Bossert trim was being installed. In 1910 a temporary injunction was granted and the case just closed was to have this injunction made permanent. The trial ran over several days and a deal of testimony was offered. It was shown at the trial that the Carpenters' Union, by the same methods used against the Bossert firm, had practically closed Manhattan to all manufacturers of non-union trim. The firm of Louis Bossert & Son and the Albro J. Newton Company, who had a like case, are to be congratulated for the stand they took against the Union. By the decision the great market of the Borough of Brooklyn is kept open to all manufacturers of trim, and the conspiracy of certain manufacturers and the Carpenters' Union is routed.



THE LATE DANIEL SIMONDS, FITCHBURG, MASS.

Two Million Dollar Timber Deal

One of the most important timberland deals ever made on the Pacific coast was announced on Apr. 20 by James D. Lacey & Co., Chicago, who acted as factors in the sale of Berth W on the Lilloet river. The Deering Plow Company took over the timber at a total cost of $2,100,000. It was sold on the basis of $3.00 a thousand feet, the estimated yield of the tract being 700,000,000 feet. Less than a year ago the former owners bought the tract from the Shevlin estate of Minneapolis for $700,000.

Taylor & Crate Interests Expand

Taylor & Crate, hardwood wholesalers of Buffalo, have acquired considerable property for yarding purposes at Buffalo. Last fall the company bought twenty-seven acres fronting on Military road, Buffalo, 1,000 feet deep to the New York Central tracks and extending south from the point where the Lackawanna railroad crosses Military road to a point between Coulson and Winton streets. Recently an additional seventeen

acres was purchased, giving Taylor & Crate a frontage of eighteen hundred feet on Military road. Thus they have acquired a tract of 1,000x1,860 feet, which will be utilized for an extensive hardwood yard.

Jackson & Tindle Move Office

Jackson & Tindle of Buffalo, N. Y., announce the removal of their offices from the old location on Niagara street to the seventh floor of the New York Telephone building. The change was effected May 1. This concern is one of the largest hardwood factors in the North.

Nichols & Schuppert, Chicago

Two of the "old guard" of the Chicago hardwood industry recently joined forces under the firm name of Nichols & Schuppert. Both of these men have been for years actively engaged in the hardwood business in the employ of two of the oldest companies in the city. George A. Nichols has been connected with W. B. Crane & Co. for thirty years, while William L. Schuppert has for the last twenty years been employed by the Keith Lumber Company. The new concern will maintain a wholesale hardwood yard at 2420 South Loomis street.

High Point Furniture Company's Plant Burned

It is reported from High Point, N. C., that the plant of the High Point Furniture Company of that place was burned on Apr. 24, entailing a loss of $40,000. Only the large finishing room was saved. Insurance to the extent of $60,000 was carried on the entire plant. It is announced that the plant will be rebuilt immediately.

Hardwood Manufacturers' New Rule Books

The revised and reprinted grading rules of the Hardwood Manufacturers' Association of the United States have just come from the press in book form. The rules were revised in accordance with the changes authorized at the recent annual meeting at Cincinnati. The new issue has a different cover design than the old issues of the manufacturers' rules, namely, it has a green cover, through which two red stripes run longitudinally. The previous issue had pink covers through which longitudinal lines were drawn. It is anticipated that the change of color will make it much easier to identify the new issue. The revised rules became effective on May 1, 1913.

Proceedings of the Wood Preservers' Association

The secretary of the American Wood Preservers' Association announces that the proceedings of the ninth annual meeting will be ready to mail on or about May 15. He states that he has done everything possible to get the proceedings out sooner, but on account of a printers' strike the books were delayed in delivery. The books will contain 100 pages more than last year's proceedings and will be profusely illustrated.

Kendall Lumber Company Buys Timber

It is reported that the Kendall Lumber Company of Pittsburgh and Connellsville, Pa., has purchased a tract of 4,000 acres of hardwood along the Cheat river in West Virginia. The company is having the timber cruised and surveyed for operations. The sawmilling will begin immediately upon the completion of the railway.

Failure of Paducah Concern

The Lucas Land & Lumber Company of Paducah, Ky., is in the hands of Receiver Barnett of that place, who has sold the lumber owned by the company. The order specified minimum prices at which the receiver could dispose of his stock. Receiver Barnett is president of the Paducah Veneer and Lumber Company of Paducah, which concern was responsible for the bankruptcy proceedings.

A Lumber Camp in New York City

There is a good sized lumber camp, as busy as any professional camp, in operation in New York City. It is in Forest Park, in the Borough of Queens, and here can be seen every phase of woods work from the chopping of the "lead" and felling of the tree to final conversion of the logs into lumber. The ravages of the chestnut blight are the cause of the maintenance of this camp. Only chestnut trees are being cut and converted into lumber, railroad ties, poles, posts, etc. The chestnut blight, which in the last few years has wrought havoc among the trees along the northern Atlantic seaboard, dealt very severely with the trees in New York City and the adjacent country. In Forest Park it caused the death of 20,000 trees that were scattered over the 700 acres that the park contains. These dead trees spoiled the beauty of the park; therefore there was nothing to do but to remove them. The work of removal has been going on only a short time. Upon the decision to cut this dead timber bids for removal were advertised for, and it was found that, instead of the dead trees being a source of expense, they were actually worth considerable money. The contractor who is doing the cutting gives the city a percentage of his profits in the transaction. Trees that are of a certain size and length are sold for poles, and some of the smaller ones are used for railroad ties. Even the sawdust is utilized, while the slabs are cut into surveyors' sticks and the residue into firewood.

* * *

It is the man that uses the saws who ought to know something of their quality, so why not consult him as well as the price when it is time to buy new ones?

Hardwood News Notes

MISCELLANEOUS

The Batesville Furniture Company has commenced business at Batesville, Ind.

The Chicago Veneered Door Company has moved from Chicago to Laporte, Ind.

The Colonial Cabinet Company, St. Louis, Mo., has increased its capital from $25,000 to $50,000.

The Standard Woodenware Company, Skowhegan, Me., has incorporated with a capital of $25,000.

The Reliable Incubator & Brooder Company, Quincy, Ill., has increased its capital stock from $20,000 to $50,000.

At Murfreesboro, Ark., the Pike County Lumber Company has been incorporated, the capitalization being $10,000.

Fire damaged the lumber sheds of the Bowie Lumber Company at Bowie, La., to the extent of $50,000 on April 17.

The Empire State Hardwood Lumber Company has been incorporated at Buffalo, N. Y., with a capitalization of $10,000.

The American Manufacturing Company, manufacturer of furniture, at Grand Rapids, Mich., has incorporated with a capital stock of $40,000.

The South Bend Dowel Works has been incorporated at South Bend, Ind., with an authorized capital of $50,000, by J. E. Kuntz, T. E. Kuntz and R. M. Kuntz.

The Westerfield Furniture Company has been incorporated by W. D. Westerfield, Louis E. Yewell, W. L. Stephens and J. D. Pruitt at Owensboro, Ky., with a capital of $8,000.

The Thompson Lumber Company has been organized by W. D. Thompson, G. H. Thompson and C. H. Thompson, the capital stock being $50,000. This company is located at Waterford, Wis.

J. M. Roper, J. H. Fulmer, Jr., of Mishawaka, Ind., and H. G. Niles, South Bend, Ind., have incorporated the Roper-Reese Lumber Company with a capital stock of $500,000, at West Liberty, Ky.

The Phillips Lumber & Manufacturing Company has been incorporated at Charlestown, W. Va., with a capital stock of $50,000, by R. H., Bessie, O. K., Alma F. and Gertrude Phillips of Charleston, W. Va.

The Brown Lumber Company, Fordyce, Ark., has been organized with a capital stock of $75,000, of which $60,000 has been subscribed. The incorporators are J. M. Brown, A. B. Banks, G. M. Hampton and others.

The Pine Grove Lumber Company of Junction City, Ark., has filed articles of incorporation with a capital stock of $10,000. The incorporators are: J. T. Lewis, W. B. Workman, A. H. Proctor, J. B. Higman, Jr., and C. D. Harris.

The plant of James B. Tatem & Son, Putnam, Conn., was totally destroyed by fire on the night of Apr. 24. The company is making plans for immediate rebuilding. It is engaged in the manufacture of handles, picker sticks, leather capped chisels, lawn mower handles, golf shafts, and dimension ash, hickory, dogwood and persimmon.

CHICAGO

The Wisconsin Veneer & Panel Company was organized at Chicago on May 1 to take over the Chicago business of the Wisconsin Seating Company of New London, Wis. J. H. Dunn has been the sales representative of the Wisconsin Seating Company for several years and continues as manager of the Wisconsin Veneer & Panel Company, which is a separate corporation. The new company is located at 165 N. Elizabeth street, and will handle veneers as well as panels.

The Folding Furniture Company has been incorporated at Chicago, Ill., with an authorized capital stock of $10,000.

W. D. Reeves of the W. D. Reeves Lumber Company of Helena, Ark., has been in this city for several days on a business trip.

B. F. Dulweber of the Dulweber Lumber Company, Cincinnati, O., has been in the city for several days on business in connection with the erection of his new plant at Morehead, Miss., which mill is 70,000 feet capacity band mill and lies between Greenville and Greenwood. It is rapidly nearing completion.

J. M. Wells of the American Hardwood Lumber Company, St. Louis, Mo., spent several days of last week in the city.

Thomas W. Frye of the C. F. Luehrmann Hardwood Lumber Company, St. Louis, Mo., has been a prominent Chicago visitor this week. Mr. Frye says that the hardwood trade is very favorable. He states that while there is a slight easing of demand, it cannot affect hardwood business as there is very little hardwood stock to be sold anyway.

W. B. Seaman of the Seaman-Kent Company, Ltd., Toronto, Ont., stopped off at Chicago for two days of this week to confer with his local representative. Mr. Seaman is en route from Memphis to Toronto.

The Christiansen Lumber Company, formerly of the Rector building, announces that on May 1 it moved its offices to 1147-49 Peoples Gas building, 122 South Michigan avenue.

The Konzen, Stumpf & Schafer Lumber Company of this city has changed its name to the Konzen & Schafer Lumber Company.

It is announced that the Chicago Mill and Lumber Company of Chicago recently purchased the plant, docks and other property of the Sandusky Lumber & Box Company of Sandusky, O. The consideration is said to have been in the neighborhood of $1,000,000. The plant will continue operations under the direction of the Chicago headquarters, with a resident manager in charge.

The Oak Flooring Manufacturers' Association of the United States has just issued, through its office at Detroit, a handsome pamphlet on oak flooring which contains a summary of grading rules for oak flooring, methods for arriving at the amount of flooring needed, standard weights, methods for handling, laying, scraping, etc.

The Lumbermen's Club of Chicago has in the last few weeks provided various attractive features for its membership. One of these was the second Ladies' Night which took place on Saturday, Apr. 26. At noon May 1 the club membership was treated to a talk by Captain Healy of the mounted police of Chicago on "Traffic Conditions of Chicago and Europe."

This office is in receipt of a handsome catalogue and handbook of saw filing issued by Wm. B. Mershon & Co., Saginaw, Mich. In addition to changing the complete index of products of Mershon shops, the book is a highly efficient handbook on saw fitting and care of saws in general.

The Lumbermen's Association of Chicago will hold its regular meeting at the Hotel La Salle on May 20. The officers of the National Hardwood Lumber Association will be in attendance.

H. Pringle, superintendent of the Wisconsin Lumber Company's plant at Deering, Mo., has been in Chicago for some little time in conference with the head office of the company in this city.

James Okoneski, representative of the Arpin Hardwood Lumber Company of Grand Rapids, Wis., was in Chicago early in the week.

J. C. Henderson, president of the Cross Lumber Company, Clarksburg, W. Va., recently stopped at this city on an extended business trip.

J. E. Rhodes, secretary of the National Lumber Manufacturers' Association, moved his offices on the first of May from the twelfth floor of the Stock Exchange building to the sixteenth floor of the new Otis building, La Salle and Madison streets. The new quarters offer much more satisfactory facilities for taking care of the business of the association.

NEW YORK

The Shepard & Morse Lumber Company has moved its headquarters from Forty-second street to 200 Fifth avenue.

S. C. Strock, for many years identified with the New York wholesale trade, has been engaged as manager for the Interstate Lumber Company, wholesale hardwoods, with office at 11 Broadway and yards in Jersey City and Newark, N. J. Mr. Strock was formerly with Granger & Lewis, yellow pine manufacturers. In addition to handling a full line of hardwoods, the company will also trade in yellow pine.

F. R. Whiting, of the Whiting Lumber Company, Philadelphia, sailed from New York during the fortnight for a brief trip to Europe. He is expected back about May 15.

The annual tournament of the Lumber Trade Golf Association will be held at the Salisbury links, Garden City, N. Y., on Tuesday and Wednesday, June 10 and 11.

Robert Sellav, lumber attorney of New York City, advises that since May 1 his office has been located at No. 1 Liberty street, New York, rooms 1601-1603.

BUFFALO

Buffalo is to have a new hardwood lumber concern to be known as the Empire State Hardwood Lumber Company, capitalized at $10,000. The office of the company will be at 1435 Marine Bank building. The directors are Louis A. Ackley, F. W. Marquard and Louis Hubner, all of New York.

The unloading committee of the Buffalo Lumber Exchange, of which Shirley G. Taylor is the hardwood member, has completed arrangements for the unloading of lumber vessels here this year, meeting the approval of both the lumbermen and the union. The report of the committee will be presented at the next meeting of the exchange.

Dr. L. H. Pennington, forest pathologist of the University of Michigan, has lately been visiting the chestnut groves of Cooperstown, N. Y., and surrounding sections to determine whether, as has been feared, the chestnut blight is spreading northward. He is very familiar with the disease, having spent last summer working with the Department of Agriculture at Washington on this particular form of tree blight. The State College of Forestry at Syracuse will conduct studies of diseases of forest trees in this state and endeavor to combat the various insects and fungi.

Hugh McLean left early this month for a trip to the southern mills of the McLean Lumber Company, which is starting in at this time with its annual stock-taking.

The Standard Hardwood Lumber Company has been getting in good stocks of oak and chestnut. The company has lately added a new department to its business and is now in position to furnish oak bill timber, car material, ties, etc.

B. E. Darling has been in Ohio and the South for the past few weeks, making lumber purchases and looking over the mill stocks coming to the yard of Blakeslee, Perrin & Darling.

Taylor & Crate have made another purchase of real estate in the Black Rock section, in addition to that recently made, and will have forty-four acres there for yard purposes.

H. B. Gorsline has gone to Kentucky for a short business trip and will visit several of the mills there in the interest of the National Lumber Company. The company will soon receive lake hardwood stocks.

O. E. Yeager states that April was a very good month at his hardwood yard. He regards the outlook as favorable and Buffalo dealers as in good position to supply the needs of the market.

T. Sullivan & Co. report that lumber is moving well. Business is mostly in elm, oak and maple.

PHILADELPHIA

The Thomas E. Coale Lumber Company reports business running smoothly, the total sales so far in 1913 being far ahead of same period of last year.

The S. B. Dill Company is complacent over trade conditions and, as it commands a fair volume of trading right along, is optimistic as to outlook.

The B. W. Cross Lumber Company of Pittsburgh, a subsidiary company of the Thomas E. Coale Lumber Company, this city, reports affairs eminently satisfactory. Mr. Dalrymple of the Philadelphia house is not inclined to quarrel with incoming business. It is a little difficult at times to get certain woods, but shipments are easier and the outlook is encouraging.

It is manifest that John W. Coles is exempt from serious business interruptions. His only complaint is that hardwoods are hard to get at times, but so far he has been able to keep his customers supplied.

W. R. Taylor of the W. R. Taylor Lumber Company has just returned from a trip to North Carolina and Tennessee, where he closed a deal for a good sized block of hardwood and white pine. He reports a well sustained business activity.

William P. Shearer of Samuel H. Shearer & Son recently returned from Atkinson, N. C., where he has been superintending the erection of a planing mill, which will be ready to turn out stuff in about a fortnight. He says trade has not been quite so brisk for the last two weeks, but he regards the lull as only temporary.

On May 1 Augustus J. Cadwallader of George F. Craig & Co. gave a planked-shad dinner for the famous Saw Dust Club, of which he is a member. The dinner was given at a resort of his near Yardley, N. J., a large contingent going down in automobiles, and a royal good time was the hearty pronouncement upon their return to the city.

Ralph Souder of Hallowell & Souder says they have no reason to complain over trading, for they are as busy as they can be, and prices give satisfaction. Mr. Souder is on a three weeks' tour of the lumber camps of North and South Carolina, getting in touch with the stock situation there.

The Benson Furniture Company, Philadelphia, was chartered under Pennsylvania laws, Apr. 30, with a capital of $10,000.

PITTSBURGH

The Hamilton Lumber Company reports an unusually good inquiry for chestnut, oak and poplar. Its eastern trade is growing nicely.

The Germain Company is moving its offices from the Keenan building to the seventeenth floor of the Farmers Bank building, where it has a splendid location. President Louis Germain, Jr., announces that all departments are busy and the outlook for really good trade is first class

Frank R. and Eugene McKelvey of Somerset, Pa., have bought a tract of timber six miles long on the west slope of Lock Mountain, containing several thousand acres. They will start a big force of men at work at once to cut the timber off for lumber crossties and mining purposes.

The Pittsburgh Wood Preserving Company is rushing operations at its plant at Connellsville, Pa., and is also starting a new plant at Orrville, O., on the main line of the Pittsburgh, Chicago & Fort Wayne Railroad. The company is also arranging to build a third plant in Michigan this summer. The recent floods have added much to its business in the way of ties, poles and timbers to be furnished for railroads and construction companies.

The Acorn Lumber Company reports inquiries good and orders for a million feet of oak which it is impossible to supply. Its general hardwood trade is first class. President H. F. Domhoff spent a week recently in North Carolina and Tennessee.

The Freehold Lumber Company has moved from the Keystone building to the fourth floor of the People's Bank building. Robert Gannon of this company reports general business conditions in lumber dealings better than they have been for months.

The Western Lumber Company announces the organization of a new hardwood department that will be managed by Norman W. Rice, who is very favorably known to the Pittsburgh lumber trade. He brings to his new field a splendid acquaintance and a remarkably thorough knowledge of the hardwood business. These are sure to make the new department of the Western a good success.

The B. W. Cross Lumber Company has added another salesman, D. W. Jones, to work its city and suburban trade. President Cross reports a record-breaking call at present for white oak.

The Williams & McKlethen Lumber Company of Lynchburg, Va., has established offices in the Business Men's Exchange on Diamond street and

will work the Ohio, Pennsylvania and Western New York trade from this office. Manager Richter reports an excellent demand for hardwood.

The West Penn Lumber Company, according to E. H. Stoner, is getting a fine lot of railroad inquiries, and if all the business comes forward that is offered this month will be a very satisfactory period in its history.

J. C. Forgie is starting a new mill in Washington county, Pennsylvania. Mr. Forgie has been doing a fine business in white oak, shipping chiefly to the eastern market and the navy yards.

BOSTON

The Skillings, Whitneys & Barnes Lumber Company, Boston, has recently moved to new quarters in the Postoffice Square building.

D. C. Cummings, for several years New England representative of the Louisiana Red Cypress Company of New Orleans, is now connected with the R. B. Currier Company, Springfield, Mass.

The Knott-Sampson Lumber Company, Boston, has been petitioned into involuntary bankruptcy by three creditors whose claims amount to $3,513.

Frederic A. Kemp, Inc., Springfield, Mass., has been incorporated with a capital stock of $50,000. The incorporators are Frederic A. Kemp, Walter S. French and Sarah E. Bliss.

The Leonard Lumber Company, Boston and Passadumkeag, Me., has been incorporated with a capital stock of $25,000. The organizers are Homer L. Baker and Elmer O. Lake.

The Fletcher Lumber Company, Springfield, Mass., has purchased about seven acres of land in that city, on which there are two buildings, one a three-story and the other a one-story shed with offices. This company purchased the Chas. H. Annoble Lumber Company on Feb. 1. The tract of land purchased has been occupied by the E. A. Blodgett Lumber Company, and it is reported that the business of the latter company has been taken over also. W. A. Fletcher, the active head of the new company, was first connected with the Baker Lumber Company of Worcester, later with the old Springfield Lumber Company, and still later as a partner of C. P. Chase & Co., Inc. He is also the head of the Thompsonville Lumber Company. George W. Stone, president of the company, is of the Stone Lumber Company, and F. A. Brainard, vice-president, is connected with the Street Lumber Company of South Hadley Falls, Mass.

BALTIMORE

Joseph Thomas & Son, manufacturers of millwork and other woodworking material, on South Sharp street, are about to make a number of improvements at the factory, including a new boiler and dry house. The firm's business has increased in a gratifying manner, and an enlargement also is under consideration.

Robert McLean, an exporter of hardwoods, whose affairs were placed in the hands of a receiver some months ago, is endeavoring to establish connection with some of the foreign firms as representative in this country. He proposes to take care of the buying, the shipment and other details, and feels that his experience of twenty years or more in the trade gives him especial facilities for making his services valuable to foreign buyers of hardwoods.

Fire, which is believed to have broken out in a pile of lumber in a shed of the George Esselman Company, manufacturer of picture frames and moldings, on Sharp street, between West and Ostend streets, on the morning of Apr. 27, burned out this plant and also that of the Chesapeake Manufacturing Company, maker of furniture. The building occupied by the two concerns took up the better part of a block, and the loss is estimated by them at not less than $100,000 each. It is supposed that a spark from the dry-kiln fell among the dry lumber in the shed. The loss is believed to be covered by insurance.

The plant, machinery, stock of lumber and other assets of the Charles J. F. Steiner Mantel Company, Monument and Eleventh streets, Baltimore county, just on the eastern city limits, which went into the hands of receivers about two months ago, are to be sold at public auction on May 22 by the receivers, Howard W. Jackson, Lee I. Hecht and George H. Kubst. The property will be offered both as an entirety and in detail, the sale being made so as to produce the largest amount.

Augustus J. Cadwallader, a member of the well-known Philadelphia lumber firm of George F. Craig & Co., is to be married to Mrs. Loula Shafer Sands of Baltimore, who is the daughter of Mrs. J. P. Shafer of Terra Alta, W. Va. The marriage is to take place early in June at the home of the bride's mother.

COLUMBUS

The report of the city building inspector for the month of April shows a large increase in the number of permits issued and only a small increase in the valuation of the buildings projected. For the month there were 1,046 permits issued as compared with 413 permits in April 1912. The valuation of the buildings projected in April 1913 is $774,000 as compared with $745,000 in April 1912. Since the first of the year the valuation of buildings projected is $1,515,000 as compared with $1,514,000 for the corresponding period in 1912.

John R. Davis of the Davis-Eakin Lumber Company of Weston, W. Va., was a visitor among the Columbus wholesalers recently.

F. B. Pryor of the W. M. Ritter Lumber Company reports a good demand for hardwoods from manufacturing establishments and from the retail trade. Prices are holding up firmly and there is no indication of weakness in any quarter. Mr. Pryor believes there will be a continuation of the good trade during the summer. Shipments are coming out more promptly and the future outlook is bright.

L. B. Schneider, sales manager for John R. Gobey & Co., reports a good demand for hardwoods with prices ruling firm. Mr. Schneider looks for a still better trade in the near future.

F. Everson Powell of the Powell Lumber Company says hardwoods are selling well and prices show no signs of weakness. He believes that unless the tariff affects the market to a large degree there will be a good demand for hardwoods during the summer.

A. C. Davis of the A. C. Davis Lumber Company reports a good demand for all hardwoods with prices ruling strong.

Manager Maul of the Appalachia Lumber Company reports a good demand for hardwoods, although the recent floods interfered with shipments to a certain extent. He says prices are holding up well under the circumstances.

INDIANAPOLIS

The hub factory of C. P. Ariens, near Connersville, was recently burned with a loss of $15,000.

A final report as receiver for the Wabash Cabinet Company has been filed in the United States court by the Central Trust Company, which has paid $2,535.83 into the court.

George W. White, H. B. White and L. D. Ault have organized the Indiana Wood Products Company, which will conduct a general woodworking business at Spencer. The company is incorporated with an authorized capitalization of $20,000.

Notice has been filed with the Indiana secretary of state that the Dynes Lumber Company has changed its name to the Indianapolis Lumber Company.

With an authorized capitalization of $50,000, the South Bend Dowel Works have been organized and incorporated at South Bend to conduct a woodworking business. Those interested in the company are J. E. Kuntz, T. E. Kuntz and R. M. Kuntz.

For the four months ending Apr. 30 building permits issued by the city amounted to $3,070,403. During the corresponding period of 1912 permits issued reached $2,116,005.

About 350 employes of local planing mills are on strike, demanding recognition of the International Brotherhood of Carpenters and Joiners and demanding a minimum wage of thirty-five cents an hour. Practically all of the local planing mills and several furniture factories are affected. The strikers are demanding a closed shop, and an effort is being made to settle the trouble by arbitration. About 125 hardwood floor layers are also on strike, demanding recognition of their union and a minimum wage of thirty-five cents an hour and fifty hours a week.

MEMPHIS

Despite the flood conditions in the Mississippi valley, bank clearings in Memphis during April involved a total of nearly a million dollars more than the corresponding month last year. It may also be noted that the figures are the largest ever recorded for that particular month. Owing to the small sales of cotton and owing to the interruption to lumber manufacture and distribution, the showing has occasioned no little surprise. It is taken as indicating a very wholesome condition in business and financial circles here.

J. W. Dickson, president of the Valley Log Loading Company, attended the meeting of the executive board of the National Hardwood Lumber Association, held at the Seelbach hotel, Louisville, Ky., May 6. Mr. Dickson is one of the directors of that organization.

W. B. Morgan, secretary-treasurer of the Anderson-Tully Company, has gone to Chicago to attend the hearing in the Pridham box case, which involves the same rates on goods shipped in wooden boxes as apply on those shipped in fiber containers. Mr. Morgan was recently elected chairman of the National Classification Committee on lumber and wooden box interests.

W. R. Barksdale reports that his mill at Cyclone, Miss., is operating on full time and that the outlook is very good. The other mill owned by him is not in operation at the present time, but will be started as soon as the corn and cotton crops in that territory have been started. Mr. Barksdale has almost completely recovered from the very severe attack of rheumatism from which he suffered a short time ago.

F. E. Gary of the Baker Lumber Company, Turrell, Ark., is authority for the statement that the plant of the firm has already started operations. He says that it has not been possible to do any logging work, but that this will be undertaken as soon as the water recedes somewhat further.

The offices of the Southern Hardwood Traffic Bureau will be removed from the Kallaher building to the Exchange building. This step will be taken in order that the offices may be more conveniently located from the standpoint of the lumbermen who are on the advisory board and also in order that the offices of the bureau may be closer to the offices of the various railroads entering this city. The bureau is finding a great deal of work to do and the board of managers has been quite active. George D. Burgess of Russe & Burgess, Inc., is president, and J. H. Townshend is general manager.

The Valley Log Loading Company prepared about 1,300 cars for delivery to Memphis and other points on the Yazoo & Mississippi Valley line during April. It is still loading logs every day on the upper end of that

road, although through service has been rendered impossible by the breaking of the levee at Mayersville, Miss., but this has not interfered with the work north of the break. The company is not able to do anything on the Memphis-Marianna cut-off of the St. Louis, Iron Mountain & Southern, but hopes to be able to resume in the near future. Traffic on that road has been interrupted by the flood waters from the Mississippi and it will probably be two or three weeks before the ground will be dry enough to enable the company to proceed with the loading of logs.

The Desha Lumber Company, Arkansas City, Ark., is planning to construct a big band mill at Lake Providence, La., where the company owns several large tracts of timberland. This firm has a big mill at Arkansas City and likewise has its headquarters at that point. It is suggested, however, that the building of the new mill will result in the removal of headquarters to Lake Providence. The plans of the company also contemplate the construction of a railroad from Lake Providence to connect with the V. S. & P. at Delhi, La.

Copies of the briefs filed by the Illinois Central Railroad Company in the Memphis-New Orleans rate case have been received by J. H. Townshend of the Southern Hardwood Traffic Bureau, and John R. Walker, attorney for the bureau, will prepare the briefs setting forth the contention of the shippers. It is expected that an early decision will be handed down by the commission after all the documents in the case have been submitted to that body. This is the fight which involves the advance of two cents per hundred pounds on hardwood shipments from Memphis and points in Mississippi to New Orleans. A number of hearings have already been held in this case and much will depend upon the decision. Of all the advances proposed by the railroads operating in this territory this is the only one in which the railroads have not withdrawn the increased tariff. As matters now stand the advance contemplated by the Illinois Central Railroad Company is suspended until Sept. 30 by the commission. This was done to give plenty of time for the settlement of the controversy.

May 22 is the date for the hearing in the case involving the issuance of through bills of lading on export shipments from points west of the Mississippi by way of New Orleans. This case will be handled by John R. Walker, attorney for the Southern Hardwood Traffic Bureau, but a large number of lumbermen from Memphis and the other affected territory will give evidence at that time and will pay close attention to the oral argument to be made during the hearing.

It is reported that the entire holdings of the Western Tie & Timber Company of St. Louis, located near Harrisburg, Ark., have been bought by the Tschudy Lumber Company of Memphis, and the Ozark Cooperage & Lumber Company of St. Louis. This transaction involves about 30,000 acres of hardwood timber. The Western Tie & Timber Company has owned this land for a number of years. A few years ago it was offered at $6.50 per acre and more recently it was offered at $12.50 per acre. It found no purchaser at either price, but it is understood that the amount received was substantially in excess of the last named quotation. The purchasing companies propose to cut the timber and convert it into lumber and cooperage products as rapidly as possible and also to put the land in cultivation as soon as the timber has been removed therefrom. Present plans contemplate the erection of a large cooperage plant by the Ozark Cooperage Company and the establishment of a band mill by the Tschudy Lumber Company. The plans also contemplate the building of a tram road to facilitate the development of the timber.

Building operations in Memphis during April involved a slightly larger total than during the corresponding month last year at $285,000. May has begun with several large permits and there are a number of projects just ahead which insure very heavy amounts devoted to building plans during the next two or three months. As a result contractors and those who handle building materials of all kinds are anticipating a very heavy volume of business. There is a good demand for hardwood lumber as well as yellow pine in the overflow sections in Arkansas and Mississippi, and altogether the outlook for practically all kinds of building material is considered exceptionally good.

MEMPHIS

VANDEN BOOM-STIMSON LUMBER COMPANY
Manufacturers Southern Hardwoods
Quartered Oak a Specialty
MEMPHIS TENN.

TIMBER ESTIMATES
REPORTS INCLUDED
TOPOGRAPHICAL MAP, DETAIL ESTIMATES & WRITTEN REPORT
GARDNER & HOWE
ENGINEERS
Clarence W. Griffith Department Manager, Porter Building. Memphis, Tenn.

The Mossman Lumber Co., Inc.
Manufacturers
plain and quartered red and white oak, ash, gum and poplar.
ALSO FULLY EQUIPT DIMENSION PLANT
Memphis, Tenn.

NASHVILLE

The April and March Nashville building permits for 1913 show marked increases over the same months for 1912. The totals this year were $427,366 and $186,654, respectively, and for 1912 the totals were $142,070 and $75,163, respectively.

An order for 15,000 vegetable crates for shipment to Florida is being filled by the Nashville Hardwood Flooring Company, which is making a specialty of this class of goods.

A large and modern factory for the making of shuttle blocks will be located here by Jasper Hooper of the Star Block Mills at Franklin, Tenn. Dogwood and persimmon lumber will be used.

John B. Ransom & Co. of this city have purchased and will develop 8,000 acres of fine timberland in Wayne county, Tennessee, which abounds in oak and other hardwoods.

A $50,000 corporation to be known as the Harriman Hardwood Lumber Company has been formed at Harriman, Tenn., headed by Mayor T. H. Enwright of Spring City, Hall Hagamyer of Cincinnati and others. The latter will be vice-president; T. J. Brennan of Boston is secretary.

Fire of unknown origin destroyed the spoke factory at Hohenwald of the Mitchell Wheel Company, the loss being $5,000, without insurance. Fifty thousand spokes were burned, together with the mill building and machinery. This company recently sustained heavy flood losses at Miamisburg, O.

The lumber of the Lucas Land & Lumber Company, at Paducah, Ky., has been ordered sold by the federal court and the proceeds held for distribution. It is directed that the best grades shall bring not less than $50 per thousand feet and the lower grades not less than $12.50 per thousand. The company was recently thrown into bankruptcy.

The Nashville Lumbermen's Club will co-operate with the National Classification Committee of the lumber and box interests in supporting the cause of the wooden box and the consumption of low-grade lumber in the pending contention with the fiber board and composition box people regarding freight classification which is pending before the Interstate Commerce Commission.

W. J. Cude, president of the W. J. Cude Land and Lumber Company, surprised his host of friends here and elsewhere by being quietly married recently to Miss Mabel H. Grizzard. They left for an extended wedding trip, and on their return will live at the groom's suburban home.

John W. Love of New York was a visitor here last week.

BRISTOL

The H. P. Wyman Lumber Company, with a capital stock of $24,000, was organized in Bristol last week by H. P. Wyman of the Bristol Door and Lumber Company; H. A. Johnson, a well-known hardwood lumberman of Lee county, Virginia, and J. G. Wyman of this city. The company has purchased a good sized area of timber near Big Stone Gap, Va., and will develop the property as soon as mills can be installed. All are experienced and successful hardwood lumbermen.

The Adams Lumber Company of this city has purchased a boundary of timber near Blountville, Tenn., and has installed a mill to cut it.

W. O. Came of the Bristol Door and Lumber Company returned this week from a two weeks' stay in the East. He reports that there is a decided state of expectancy and uncertainty in business circles there, due to the revision of the tariff and that conditions, while favorable, are naturally somewhat unsettled.

Frank Shell of Johnson City, Tenn., has purchased a boundary of timber near Roan Mountain, Carter county, Tenn., and is installing portable mills to develop the property.

Three sales of timber and mountain lands near Bristol were effected last week. These purchases were made by the government for the Appalachian Forest reserve. The Douglas Robinson tract in Johnson and Sullivan counties, consisting of 25,000 acres, was taken over. The

Shaffer tract of 30,000 acres was taken together with tracts owned by the Interstate Coal and Iron Company and the Unaka Springs Lumber Company.

ST. LOUIS

There was a decrease in the volume of building operations in St. Louis last month amounting to nearly a million dollars. The lateness of this season and the filing of several large permits last year increased operations last year over the normal.

Receipts of lumber by rail at St. Louis during April this year as reported by the Merchants' Exchange were 16,725 cars. During April last year the receipts were 12,767 cars, showing a gain in receipts this April of 3,958 cars. Shipments of lumber by rail last month were 14,301 cars. A year ago the shipments were 10,092, an increase this April of 4,209 cars. There were no shipments or receipts by river during either of the years.

Twenty-four new members joined the Lumbermen's Exchange at the last meeting of the board of directors. The membership came from Missouri, Arkansas, Louisiana and Ohio. The aggressive campaign recently inaugurated by President F. H. Smith is responsible for the big gain.

The inspection department of the Lumbermen's Exchange is busy. Not only has the local work increased but that from the outside is growing all the time.

H. Borcherding is now covering the South for the Thomas E. Powe Lumber Company. Mr. Borcherding was formerly of Baton Rouge, La.

W. W. Dings of the Garetson-Greason Lumber Company says that company is getting more orders than it can fill, their railroad business being especially heavy. The recent heavy rains have bothered the company's mills, one or two of them working only part of the time and the others working whenever possible.

E. H. Blumer of the Lothman Cypress Company is in the northern territory looking after his customers. He said before leaving that business was good and that the company is well satisfied with both the volume of business it is doing and the prices obtained.

Thomas E. Youngblood, secretary of the Payson-Smith Lumber Company, is in the South buying lumber for the company. While the headquarters of the company are located in Minneapolis, it has a branch in St. Louis, of which Mr. Youngblood is the local manager. The company handles principally oak, gum, ash and hickory.

Roland F. Krebs of the Krebs-Scheve Lumber Company, who was married a couple of weeks ago, has returned from his wedding trip and has located in his new home in the West End.

LOUISVILLE

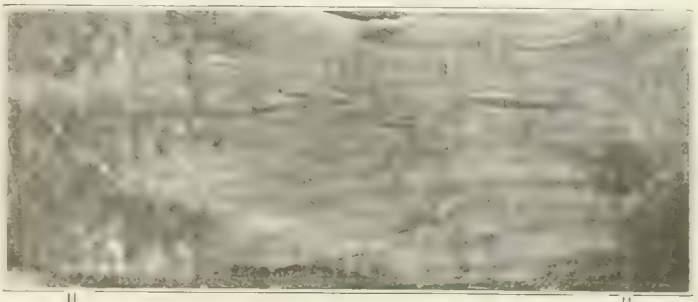
The Louisville Hardwood Club entertained President Charles H. Barnaby and members of the official staff and directorate of the National Hardwood Lumber Association May 6. Mr. Barnaby is a favorite of Louisville lumbermen, and they had been planning to greet him and his official family for a long time. The executive committee of the association met Tuesday morning. A luncheon followed, the Louisville lumbermen being hosts. The afternoon was taken up in various ways, many of the lumbermen visiting the yards, which were in the flooded district. In the evening the visitors were entertained at dinner, President Edward L. Davis of the Hardwood Club presiding. Numerous informal talks were made regarding the lumber business in general and the National Hardwood Lumber Association in particular. The affair was most enjoyable.

The Louisville Hardwood Club has joined with the Kentucky Retail Lumber Dealers' Association in a protest to President Wilson against the approval of the Sundry Civil Service Appropriation bill in its present form, under which farmers' organizations and labor unions are exempted from prosecution with funds appropriated for the use of the trust-busters. The lumbermen felt that while there was no immediate prospect of its becoming necessary to undertake prosecutions of the exempted type, such a provision was decidedly tinged with the spirit of class legislation, and was accordingly unwholesome. The bill now pending is similar to that which was vetoed by President Taft just before his retirement from office.

Louisville lumbermen report that a slight car shortage is about the only visible effect of the recent floods, and that is accounted for on the ground that much delayed freight is in transit, many cars which should have been released still being held up awaiting delivery. However, the difficulty regarding rolling stock is by no means serious, and it is expected that it will have completely disappeared within a few weeks.

Hardwood interests watched with considerable satisfaction the progress of the suit of the Ohio Valley Tie Company of Louisville against the Louisville & Nashville Railroad, which culminated in a verdict for a little more than $56,000 damages in favor of the tie company. The charges in its suit were that the railway endeavored to ruin its business by posting prohibitive rates on ties and in other ways interfering with the legitimate operation of the business. The fact that the road provided an insufficient number of cars and required the tie concern to rehandle them into other cars in Louisville was one of those regarded as most damaging to the case of the railway, which put up a strenuous fight. The Louisville & Nashville, it is also stated, has put into effect all over its line in Kentucky a tie rate no greater than the rate on rough lumber of the same kind, thus carrying out the principle laid down by the Interstate Commerce Commission on numerous occasions.

Friends of D. E. Kline, head of the Louisville Veneer Mills, are congratulating him on the appearance and general make-up of a brochure which has just come from the press, entitled "A Novelty That Has Become a Staple: Figured Gum." The booklet exploits the advantages and desirability of figured gum lumber, veneers and panels, and, besides showing the splendid facilities of the Louisville Veneer Mills for producing that kind of stock, presents some impressive arguments relative to the development of the wood from a despised second-rater, used for



CIRCASSIAN

We are slicing a large shipment of genuine Circassian logs which are developing some striking figure; in fact—

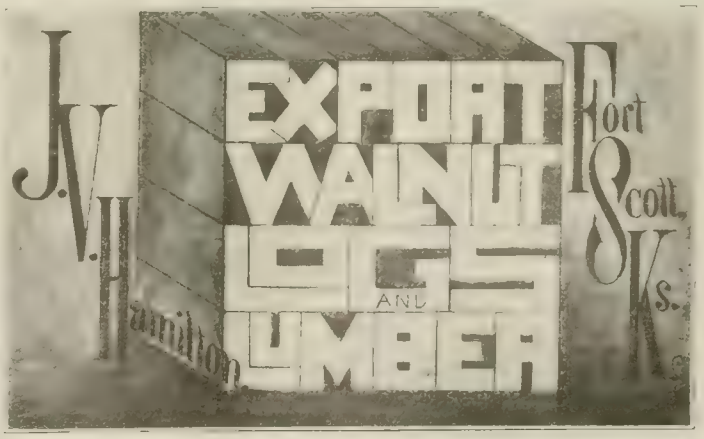
We have secured some unusually dark and beautifully figured veneer for the finest cabinet work.

Your inspection is solicited

Fred W. Black Lumber Company
Chicago

Take Douglas Park "L" to 40th Ave. and walk one block south

Bluestone Land & Lumber Company
MANUFACTURERS
WEST VIRGINIA HARDWOODS
Soft White Pine, Oak, Poplar, Chestnut, Hemlock
Band Sawed Stock
COMPLETE PLANING MILL FACILITIES
RIDGWAY PENNSYLVANIA



all sorts of lowly and humble purposes, to application in the highest grade cabinet work being produced. The booklet is handsomely printed and carefully designed, and not only reflects credit on the institution producing it, but likewise is of importance as a contribution to the literature concerning an important commercial wood.

The Louisville baseball club is right up at the top of the heap in the American association, and friends of T. M. Brown, who has a season lease on Box 23 at Eclipse Park, are assiduously cultivating the favor of that lumberman, who is in a position to provide choice vantage points from which to view the victories of the conquering Colonels.

Edward S. Shippen of the Louisville Point Lumber Company has been buying logs up the Big Sandy river, and has a supply on hand sufficient to keep the Louisville mill operating for several months. The company has some of the finest poplar logs ever brought out of the Sandy valley, it is believed.

WANTED

All Kinds of High-Grade

HARDWOODS

S. E. SLAYMAKER & CO.

Representing
WEST VIRGINIA SPRUCE LUMBER CO.,
Cass, West Virginia.

Fifth Avenue Building,
NEW YORK

CINCINNATI

Hardwood Manufacturers and Jobbers

The Kosse, Shoe & Schleyer Co.
WALNUT, OAK, AND OTHER HARDWOODS
103-4-5 CAREW BUILDING

OHIO VENEER COMPANY
Manufacturers & Importers FOREIGN VENEERS
2624-34 COLERAIN AVENUE

CHARLES F. SHIELS & CO.
SPECIALISTS IN WIDE STOCK
POPLAR, OAK, CHERRY, BIRCH

GEORGE LITTLEFORD
RED CEDAR, CHERRY
OFFICE: 1263 RICHMOND STREET

SWANN-DAY LUMBER CO.
Mfrs. YELLOW POPLAR and WHITE OAK
SALES OFFICE—SECOND NATIONAL BANK BUILDING

SHAWNEE LUMBER CO.
HARDWOODS, WHITE PINE and HEMLOCK
Sales Office—South Side Station—C. H. & D. R. R.

RIEMEIER LUMBER CO.
OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

JAMES KENNEDY & CO., Ltd.
OAK, POPLAR AND OTHER HARDWOODS
FIRST NATIONAL BANK BUILDING

H. Biggar of the lumber department of the Western Electric Company was in Louisville recently.

State Forester J. E. Barton is now putting in a nursery at Louisville. It is to be located on the state fair grounds, and will contain 400,000 plants. Ten thousand seedlings will be ready for transplanting in a year, it is believed. Sturdy native varieties will be given first place in the nursery.

ARKANSAS

A new hardwood lumber sawmill has recently been installed on the Gus Messick place, just north of Mountain Home, Ark. This mill was transferred to Mountain Home from timbered district of southern Missouri, just north of that place.

The Arkansas Indiana Lumber Company of Clarksville, Ark., is now installing a basket factory in connection with its planing mill at that place. The company will be prepared within a few days to make any kind of package for the shipment of peaches, berries, etc. The services of a thoroughly competent man from Indiana have been secured to take charge of the plant.

Wentworth H. Hays, president of the Ozark Barrel & Box Company of Fayetteville, Ark., filed a voluntary petition in bankruptcy, giving his assets at $7,000 and his liabilities at $7,809.

On Apr. 30 a deal was consummated by Dean Adams of Memphis for the sale of 20,000 acres of timberland in Crittenden and Cross counties, Arkansas, to a Cleveland lumber company. The consideration named by Mr. Adams was $250,000. The property was owned by Little Rock and Memphis capitalists, whose names were not made public by Mr. Adams. The property is well located, lying on two ridges of ground which will become rich farm land when the timber has been removed. The Cleveland concern will spend more than $100,000 this year in building tram roads from the main line of the Iron Mountain, Rock Island and Cotton Belt railroads to the timber district. Six big sawmills will be located on the property, and a large lumber camp will be established in the central portion of the timber tract. It is the company's intention to divide the property into small truck farms for the purpose of colonization as fast as the timber is removed.

Mr. Fletcher of the Hardwood Lumber Company, Alton, Ill., has been in Arkansas for the past ten days buying stock for his concern.

MILWAUKEE

Ground has been broken for a five-story brick veneer addition to the plant of the Phoenix Chair Company at Sheboygan. The new addition will be located east of the present buildings. The dimensions will be 50 by 150 feet. The present buildings of the company consist of the main building, 50 by 350 feet, having three L's 50 by 100 feet, and a warehouse measuring 50 by 168 feet. All of these structures are five stories high and of brick construction. About a year ago the company erected a new drying house and a modern power house with new boilers and engines. The Phoenix Chair Company, which was organized in 1875 with a capital stock of $50,000, has grown to be one of the largest in the world. In 1888 the capital was increased to $300,000. Several hundred men are employed at the plant and the new addition will require an additional hundred hands.

A bill which was introduced by Senator Tompkins of Ashland and has been passed by the legislature has changed the system of tax assessment on logs and other timber to be manufactured. The new law now provides for the assessment of all logs not delivered by the first of May of each year in the towns where they were cut. Heretofore the assessment was made at the town where the mill was located which was to saw the logs, no matter where the logs and timber were piled. Since the bill has been passed officials and attorneys for cities which will be affected are trying to kill the measure, as it means thousands of dollars to them. Marinette, Peshtigo, Oconto, Wausau and Tomahawk had representatives at Madison trying to obviate in some way the effect of the new law. It has not yet been published, but that is all that is required to give it a place on the statute books. A new measure to repeal the law will be introduced. If allowed to stand the law will mean a loss on the tax rolls of the above mentioned cities amounting up to $10,000.

A scarcity of men in the northern lumber camps is felt this spring by lumber companies. The Foster-Latimer Company and the Mellen Lumber Company, at Mellen, are in need of about fifteen hundred men for the operations. The big plant at Phillips that has been shut down for a number of years is to operate again, and the extensive operations of the Edward Hines Lumber Company at Park Falls will also require a large number of men. The Hines company will also run to capacity on the recently acquired Atwood interests. The Oconto and the Holt lumber companies are running their mills day and night on full crews. The additional activities and increased output by the various lumber companies this year is responsible for the great labor demand.

The Heineman Lumber Company, at Merrill, is erecting its new planing mill to the new plant in that city. The framework is completed and adds much to the appearance of the property. The planing mill is located north of the railway right-of-way and will be driven by electric power generated at the main engine room.

The new $150,000 plant of the Peshtigo Lumber Company, at Peshtigo, has been started up on the season's run. At present only the day shift is running. The plant has a capacity of 125,000 feet daily.

The Shaw company, at Crandon, has now sufficient orders to start up the hub mill at an early date. A fine stock of timber is on hand in the lake and more is arriving by rail. Fred Poole will superintend the mill.

The M. H. Sprague Lumber Company and the J. S. Stearns Lumber Company, at Washburn, have started up their sawmills for the season. The Sprague company has a large supply of logs on hand enough to keep a day shift running through the whole season. Logs for the Stearns company are being brought from the northern parts of the county and Michigan and will also keep a day shift busy for many months.

The Republic Lumber Company, for a number of years a heavy operator at the old Merryman mill at Marinette, has closed up its business in Marinette, due to exhaustion of the company's available timber supply in this section. Every employe was presented with a splendid recommendation and a substantial sum of money in addition to the regular pay check. The offices will hereafter be at Chicago.

The Mohr-Stotzer Lumber Company of Holt and Portage, which has decided to erect a large new sawmill at Wausau, as noted in the last issue of HARDWOOD RECORD, is said to have made a deal with the F. Schubring Lumber Company of Wausau, whereby the two concerns are to consolidate and reorganize. It is stated that the new company will operate the Schubring mill in the southern part of Wausau.

The Marathon Lumber Company has been incorporated at Wausau. The concern is capitalized for $650,000, and its incorporators are J. S. Alexander, W. H. Bissell and C. C. Yawkey.

Enos Colburn and others of Green Bay have incorporated as the Abrams Lumber Company with a capital stock of $10,000.

The Thompson Lumber Company of Waterford, which will operate a large lumber yard in that place, has filed articles of incorporation. W. D., Charles H. and George H. Thompson are the incorporators, and the capital is placed at $50,000.

Nels Dueholm, for a number of years sales manager for the Scott & Howe Lumber Company at Hurley, has resigned to accept a similar position for the following concerns at Oshkosh: Scott & Howe, Mellen Lumber Company, Foster-Latimer Lumber Company, Medford Lumber Company and the J. S. Stearns Lumber Company. Mr. Dueholm will make his headquarters at Oshkosh.

The Daniel Shaw Lumber Company's sawmill, which has been in operation at Eau Claire for the past fifty years, has been acquired by the John H. Kaiser Lumber Company of the same city, together with the stock and real estate. The consideration has not been made public.

The dry condition in the northern part of the state has caused forest fires, which are said to be the most serious in four years. The organized state forest rangers and patrolmen in the northern woods are keeping the flames in check, and report that the fires are confined to surface material and have not reached any tall timber. The state forest reserves have not been endangered, and if rain comes within a short time it will remove all danger.

Slow progress is being made with the last log drive on the St. Croix river, which will contain about 50,000,000 feet. This being the last drive accounts for the taking of a clear rear. It is estimated that from 50,000,000 to 100,000,000 feet of logs are at the bottom of the river after about fifty years of logging, during which time no attention was paid to deadheads. These logs will now be raised and fastened to floaters to be towed to a landing and left on the banks to dry. The St. Croix Boom Company is doing the work.

The Hardwood Market

CHICAGO

The excessive shipments of transit stock from the various yards in the South affected by high waters have commanded the bulk of the attention of the local trade during the past two weeks. The effect of these transit shipments, which aggregate a great many hundred of cars, have unquestionably been felt in the actual call for lumber, but the lumber trade is standing firm on hardwood prices, being confident in the future of the situation. A great many of the cars have already arrived and have been disposed of, but some are still to come, which will tend to maintain this condition for a short time longer. Unquestionably as soon as this excess of stock has been disposed of, the condition which was manifest before the high water will be resumed.

The relative position of the various standard species and grades of hardwoods is about maintained. The call for all items is favorable, for some of course stronger than for others, but none could really be called weak. While reports from the South show there is quite a little gum available, still this desirable wood does not show any tendency to become panicky in price.

The building situation locally is very favorable to continued prosperity on the part of those catering to the building trade. The factory trade is active because of the transit stock conditions noted and possibly seasonable reasons.

On the whole the situation is favorable in the Chicago market.

NEW YORK

The hardwood market is good and prices continue firm. The yard and manufacturing trades report a decline in activity but the aggregate volume is well maintained and business is better than a year ago. There is still some complaint of inability to get good stocks though many say the stocks are available when the price is right. Birch and basswood are very strong and stocks are scarce. Birch has advanced $2 on some items. Basswood has advanced $1. Another change is noted in ash which, next to plain oak, has been the strongest feature of the market for a long time. Inch 1's and 2's are up $1. The balance of the list remains firm, and inquiry is generally satisfactory in the wholesale market.

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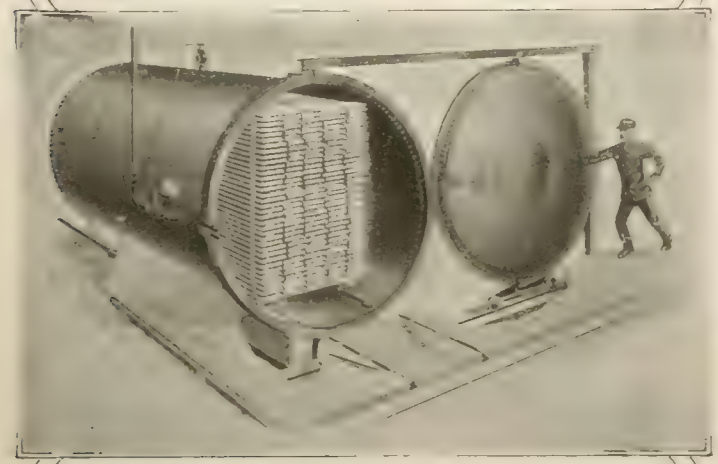
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BUFFALO

The past few weeks have been quite active in the hardwood trade and dealers are satisfied at the volume of business and the prices prevailing. A certain amount of disturbance to lumber conditions is found in the tariff agitation and the numerous strikes prevailing through this section of the country, but factories are running actively and taking a fair amount of lumber, though less than they were a short time ago. Prospects are for fair business during the present month. The buying is likely to be restricted somewhat by the uncertainties of the tariff.

Oak is selling readily, with the usual scarcity of dry stock. Prices are high. Thick ash sells very well, but the supply of it is small. Maple is quite active and shows much strength in price. Birch is selling well at the yards, which make it a specialty, most of the business being in car lots. Mixed-car buying is small in birch. An occasional car of cherry is selling. Poplar in most grades is in steady demand.

PHILADELPHIA

Although trading during the last fortnight has lacked some of the sharp activity of the early part of April, the volume of business gives satisfaction. The slight falling off in sales is attributed to the conservative attitude toward deals for future delivery, many of the buyers still holding to the belief that a break in prices will come, although there are now no apparent signs of weakening. The wholesale consuming industries continue fairly busy. Building work is progressing with the advancing spring weather. Yardmen are better stocked and activity in sales is increasing. Dry stocks in standard woods are still scarce and command stiff prices. Special fancy woods are in a market of their own with values high.

No material change is noticeable in the general hardwood situation from a fortnight ago. Quartered oak is racing with plain oak for top liner; wide poplar continues to make new friends; maple flooring is strengthening; sound wormy chestnut gains ground; high-grade chestnut holds firm; ash is in good call, with strong prices; the mahogany and veneer business is active; low-grade stock in all hardwoods is short of demand and prices are well maintained.

PITTSBURGH

The furniture trade at present is the most encouraging feature of the hardwood business. All furniture factories in this section are ordering good supplies. They are running full, and the big payrolls of this district are encouraging them in the belief that trade will be good all summer For this reason ash, hickory, maple, poplar, walnut and cherry are in especially active demand. Dry stocks are scarce and country mills which have lumber or timber of this kind are reaping a nice harvest this summer. White oak continues to be the strongest seller on the list. There is no doubt but that this lumber is in better demand now than at any time for years. Every mill in western Pennsylvania is rushed with orders and is hurrying forward its shipments now that the roads are getting passable. Railroads are buying all the white oak timbers they can get. White oak for general construction purposes and also pole oak are badly wanted and command a premium in many quarters. Prices on hardwoods are firm with a little tendency to raise. There is good evidence that the hardwood business will continue first class throughout the summer.

BOSTON

In the market for hardwood lumber there is a fair amount of activity to the demand. Buyers as a whole are a little slow to anticipate their wants. Some claim that business will not be so good this summer as it was last, due to the generally unsettled condition of business throughout the country; others are optimistic and cannot see anything but good business ahead. Manufacturers of veneers are doing a good business and are reported to be getting firm prices. The piano trade is good and plants in this vicinity are running full. Furniture manufacturers, especially those catering to the office supply end of the business, are said to be busy.

There has been no letup in the strength of hardwood prices and in some cases dealers are talking further advances. For plain oak the call is very good. Dealers are finding it difficult to get supplies fast enough in some cases. The manufacturers of plain oak are strong in their demands for top prices and are upheld in their position by the fact that their stocks are not large. Quartered oak is firm and in very good demand. Maple is in fair call with prices steady. Whitewood is in moderate demand in this market. The better grades are in the greatest demand at the present time.

BALTIMORE

The hardwood movement keeps up as well as could possibly be expected under the circumstances. There may not be that snap to the trade in various directions that characterized it in the early spring, but consumers are demanding lumber in quantities that take up the output of the mills, and according to information available here, there are no extensive accumulations to be taken care of. Some of the millmen continue to report that they could do a larger business if stocks were to be had, while the prices realized appear to be in the main very acceptable. One of the [illegible] features of the trade is that while the interest in

supplies may have eased off somewhat, the quotations are holding their own with marked firmness. The producers still contend that they have no reason to make concessions and the buyers are apparently prepared to take up all of the supplies that are offered at the prevailing prices. Some hesitancy is being shown by the yardmen, perhaps for the reason that not a few of them carry full assortments. When it seemed almost impossible to get lumber, extensive commitments were entered into by the yards, and the filling of these contracts has given them about all of the stocks which they have room for. As a consequence they are slow about placing further orders, being disposed to wait until actual need develops for the particular kind of lumber. This tendency, however, has not yet become sufficiently pronounced to cause accumulations at the mills, and the latter are being operated to capacity. The upward movement of prices seems to have been halted, and no further advances are being reported. For the present, at least, the quotations are well sustained and neither the mills nor the dealers are holding out special inducements.

Chestnut of all grades is moved with dispatch. The interest in sound wormy seems to be unabated and mills are shipping out their product as fast as it can be produced, while the other grades are also in very good request. Chestnut, in fact, is among the most active of the hardwoods at the present time, and is bringing very satisfactory returns. The feeling with respect to oak in the export trade is easy. Stocks have been going forward in such quantities that some of the ports on the other side of the Atlantic have very liberal selections, and the brokers are warning against forwarding on consignment. One of the woods which is decidedly quiet and has not borne out earlier expectations is cypress. The demand, for some reason, has not kept up, and at the present time the range of the quotations is very moderate, with stocks not especially heavy, but with buyers indifferent. Less cypress seems to be used for interior finish than has been the case at other times, and in spite of the many building permits taken out the inquiry for cypress halts. It is to be said that the tendency with respect to ocean freight rates is toward a lower level, so that the decline in the quotations on the other side does not fall entirely upon the shippers.

COLUMBUS

The hardwood trade in Columbus and central Ohio has been rather active during the past fortnight despite the flood which caused so much damage to the lumber industry of the state. The demand from retailers and from factories is good and prices have been ruling firm. There is no indication of weakness in any direction, and every change is toward higher levels.

Dry stocks are still generally scarce. There is no accumulation of any variety and grade, and this shows a pretty uniform movement. Building operations are very active in every locality and this means a continuation of the good demand. Yard stocks are only fair, and with good buying in the near future stocks will have to be replenished.

The railroads are now able to move shipments more promptly. Some of the railroads are troubled with congestion at the junction points. Furniture, automobile and vehicle factories are good buyers of hardwoods.

Plain and quartered oak is in good demand. There is also a good demand for poplar and the wide sizes are now moving better. Chestnut is strong and the volume of business is satisfactory. There is a good demand both for ash and basswood.

CINCINNATI

The good tone to the trade in general continues, particularly in the hardwoods. There has been a much needed gain in the accumulation of hardwoods at the yards. Quite a little lumber has been received and been put away since the high water, which was accumulated along the railway lines, and yards here are in good shape to supply the trade. The wood consuming factories in all sections drawing supplies from this market are keeping up nicely and there is every reason to expect a continuation of present good business. Many of the woods most in demand, like plain oak, ash, etc., are still hard to obtain in quantities, and the balance of the hardwoods are just a little better in quantity than a few weeks ago. From a dealer's standpoint this is encouraging and does not show a tendency toward falling off of demand, but rather that manufacturers both large and small are catching up a trifle. Possibly the demand right now is not quite up to a month ago which indicates a between season rather than a slack period. A few dealers are fearful of the tariff tinkering affecting business, but this opinion is not held generally. Many dealers would prefer that the administration would let the protective features alone on some items, but do not fear any general let-down in business.

With prices ruling high on all items and the demand good, there is little for hardwood men to complain of. Inquiries are numerous, indicating continued strength. The price question seems to be fixed for the time being at least. All buyers know that hardwoods cannot be had under present prices, with indications toward an upward trend. There is more chance for the wholesaler to pick up lots of hardwoods than there was a few weeks ago but the price is right up top and the demand quite up to supply. At this point the only change noted is a little less difficulty in obtaining supplies.

The demand for low-grade poplar is just as good now as it has been for the past several months, with prices at top notch, and this will un-

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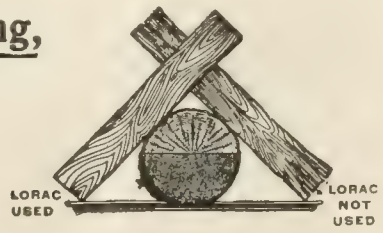
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doubtedly continue. No. 1 common and better is holding up well and the improvement over the light demand of a few months ago is marked, with prices holding firm. Poplar manufacturers say they are well satisfied with market conditions and that they are well supplied with orders. They claim the market will steadily improve.

INDIANAPOLIS

Hardwood lumbermen report that business has been exceptionally brisk during the last two weeks. There has been an especially heavy demand for all grades of oak and for mahogany veneers. Thus far there has been no trouble in filling orders promptly. The transportation lines are now in normal condition and are furnishing cars promptly.

The large trade has been due to the demands of furniture factories. Every furniture factory in the state is having a phenomenal business because of the fact that furniture in hundreds of homes was ruined by the recent flood. One Indianapolis furniture factory reports its April business four times as large as its business in April 1912.

Prices are steady, but there has been no change during the last two weeks.

MEMPHIS

The demand for hardwood lumber here is reported very good and the volume of business is quite up to the average of the past few years at this time. The call is particularly insistent for all grades of both red and white plain oak, and prices are well maintained. There is a pronounced scarcity of cottonwood and gum in the lower grades and the demand for both is in excess of the supply. Offerings are reported quite light in the open market and some of the box manufacturers and other consumers are meeting with difficulty in securing their full requirements, particularly in 5-4 and 6-4 gum. A slight improvement has been reported in the upper grades of red gum but some members of the trade say that the situation is no better except with reference to thin stock which is moving pretty well into export channels. The demand for ash is good and offerings are readily absorbed at current prices. Sap gum in the upper grades is in good request and cypress continues to move freely in selects and shops. The higher grades, however, are showing no change. There is a good export demand for southern hardwoods, and shipments to Europe are on a pretty full scale.

Some uneasiness has been occasioned by the announcement of the steamship companies that, after the expiration of sixty days from May 1, they would abrogate their agreement to honor through bills of lading from the west side lines and to absorb the demurrage charges at New Orleans. Exporters here, however, believe that an amicable adjustment will be reached in this matter before the date for the new ruling to become effective.

NASHVILLE

Good conditions continue to prevail on the local hardwood market, with plain oak still leading in demand and quartered oak a good seller. There are good calls, too, for hickory and ash, a fair demand for chestnut and poplar, and little change in cottonwood and gum. Dry, desirable stocks of all hardwoods are low and are considered very good property just now. Prices are steady. There are active calls for factory stocks, also for laths and shingles. Lower grades are in demand. Mill stocks are considerably broken. Good weather has given a decided impetus to the business and spring building operations are very active, the retailers sharing in the activity. Business, including railroad traffic, has about adjusted itself following the recent floods, and shipments are becoming regular once more. Some dealers say this is the first time in years that dry stocks have not been equal to the demands. Local box factories have their hands full filling orders. The hardwood flooring factories are busy and good exports are being made to England, with rush orders from Austria.

BRISTOL

Trade conditions in this territory continue favorable and the prospects for business are very encouraging. Activity continues to characterize the hardwood industry and it is believed that business will continue brisk during the remainder of the year. There is a decided tendency on the part of the manufacturers to increase their operations, wherever new timber can be secured, and several large concerns that have about exhausted their present holdings are looking about for more, although there is very little timber for sale at what is considered a fair price. The owners are continually advancing the price and many refuse to even consider selling, especially where they have growing timber.

LOUISVILLE

Business conditions in the Louisville market are generally satisfactory. Demand is remaining excellent, and both inquiries and orders are being received freely. The agitation regarding the revision of the tariff does not appear to have caused much unrest, few industries regarding the proposed changes with anything like apprehension. The textile trade, in fact, appears to be about the only one seriously wrought up over the situation, and even its members are not greatly alarmed. Consequently the lumbermen, who all along have contended that rapid disposition of this question, without much regard for the details of the revision, was the big desideratum, are pleased with the progress which is being made.

and are hopeful that the change will be disposed of shortly so as to give manufacturers in the affected lines chance to adjust themselves promptly.

Meanwhile hardwoods of all kinds are in good demand. Quartered oak is moving briskly. Plain oak continues strong, as heretofore. Ash is a good seller. Chestnut is a live mover except in the upper grades. Poplar is also showing more life, and even firsts and seconds are in better call. Collections are reported to be considerably improved.

ST. LOUIS

There has been a fair amount of activity manifest in the hardwood market during the past ten days. More improvement is anticipated in the near future. There is still a great scarcity of red and white oak, particularly red oak, and they are much in demand. The lower grades of both items are also in fair request. There is a good call for ash, which is very scarce. Prices are firm with an upward tendency. Gum is rather quiet at present. Poplar is in fair demand, especially the lower grades. An improvement is shown in cottonwood and firm prices prevail. Other hardwood items show but little change.

MILWAUKEE

One of the most hopeful signs in the local hardwood trade is the fact that manufacturers, including sash and door and interior woodworking concerns, are placing much larger orders. This is significant, especially as most of the buying is for the purpose of satisfying the immediate wants of these concerns. Manufacturers are not inclined to buy for stock at this time, in view of the high prices and because of the fact that new stocks are beginning to arrive.

Building operations have taken on new life daily as a result of favorable weather conditions. A total of nearly 500 permits was issued during the month of April, representing an investment of nearly $1,500,000. This was a substantial gain over the corresponding period in 1912. While there is a record number of large buildings being erected in this city, it is said that an especially large number of permits are being taken out for the erection of homes. Reports indicate that plenty of building has been started all over the state. Building operations among the farmers are naturally being curtailed somewhat at the present time, owing to the rush of spring work on the land.

Stocks of northern hardwoods are so light that most concerns seem to be busy putting winter-sawed lumber through the dry-kilns in order that the demands of the trade may be satisfied. Some new basswood is arriving in the local market, while now and then shipments of birch are reported, but the movement of new stocks is not general as yet. Birch, maple, basswood and elm are wanted. Dry stocks of southern woods are light, as usual, with shipments of oak far from being equal to requirements. The demand for cypress and poplar is much stronger as a result of the increase in building operations.

GLASGOW

Quiet conditions have prevailed in the timber trade of the West of Scotland during the past fortnight. The current high prices offer no great inducement to buying ahead of immediate requirements, and the transactions reported are consequently mostly limited to the covering of immediate wants. The Montreal season will open very shortly now, and light imports may be looked for unless the demand improves very considerably. Stocks of pine and spruce are certainly light, but consumption meantime is very slow, so that stocks will be quite ample for a time. The shipyards are responsible for quite a few inquiries resulting in sales of pitch pine, birch logs, yellow pine sidings, etc. Packing-case makers report business somewhat quieter, and this is reflected in the falling off in the demand for spruce deals, resulting in part of recent shipments finding their way into store. The Riga season has not yet commenced, but numerous contracts are reported for late April-early May shipment.

The import of birch logs shows no signs of abating, each succeeding steamer bringing in several hundred logs. As a result of this a few thousand logs are at present lying on the wharf awaiting their removal into storage yards, which proves that the stock is more than ample.

The upward movement in prices appears to have ceased for the time being, and indeed in some of the recent ex-quay sales they have not even been so firm as they were. The course of prices generally will be influenced by the extent of imports during the next month or two, and except in the event of too liberal supplies coming forward they appear likely to be maintained.

Recent imports of American hardwoods have been comprised chiefly of deliveries against contracts.

Quite a quantity of quartered oak boards 1", 1¼" & 1½" has come forward, but buyers would not be induced to purchase at the high price, with the result that rather than sell at a loss, they have gone into store. The floods in the States are reported to have wrought considerable damage, and deliveries against contracts for oak, etc., are likely to be kept back, but to what extent remains to be seen.

The decline in freight rates still continues, and the latest figure two days ago was reported—Gulf timber port to Cardiff 10/2 6d June. Shippers of pitch pine are quite prepared to consider 80/- c. i. f. for 30 c. ft. average.

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LUMBER BUYER AND INSPECTOR

wanted. Large furniture manufacturer in Wisconsin using six million feet of hardwood lumber per annum has a good position for man of experience in buying and inspecting hardwood lumber. Must have large experience and first-class references. Address

"BOX 42," care HARDWOOD RECORD.

WANTED—REPRESENTATIVES

A mill cutting plain oak, quartered oak, poplar and ash, desires local representatives in the following cities or vicinities, to represent them, selling lumber on commission—Chicago, Milwaukee, Minneapolis, Grand Rapids, Detroit, Cleveland, Toledo. Address

"BOX 50," care HARDWOOD RECORD.

EMPLOYMENT WANTED

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

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TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St.,
Buffalo, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

TWO LARGE AND ONE SMALL

Tract timber in Chesapeake & Ohio and Norfolk & Western Railways, in Virginia and West Virginia. G. T. THAYER, Charleston, W. Va.

FOR SALE—SEVERAL TRACTS

of Southern timberland averaging over 60,000 acres per tract, conveniently located for rail transportation, North, South, East and West, and containing white pine, almost every known quality of hardwood, as well as coal, hematite, iron ore, oil and gas. Particulars only to principals. Address

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800 ACRES HARDWOOD TIMBER

in western North Carolina. Mostly oak, some poplar, hickory, chestnut, pine. A cove 2 miles long near railroad. $8 an acre.

W. M. PRATT, Marion, N. C.

I OWN 900 ACRES OF

hardwood timberland on Bear Island, one of the Apostle Group, in Chequamegon Bay, Lake Superior. This is estimated to cut better than 10 M to the acre, 60 per cent red and yellow birch. This timber can be logged cheaply and landed on three lines of railway at Ashland, Wis. Will sell timber or land and timber at a reasonable price. A small payment down to the right party will suffice. A. W. MACLEOD, Washburn, Wis.

HARDWOOD TIMBERLANDS

We have several tracts of hardwood timberlands, all sizes, located in western N. C. and East Tenn. We have the quantity, the quality and our prices are right. Address

SOUTHERN STATES REALTY CO.,
610 Vandeventer Building, Knoxville, Tenn.

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracts of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

TIMBER FOR SALE

TIMBER FOR SALE

14,369,400 ft. Yellow Poplar.
24,472,900 ft. Oak, Ash and Cherry.
19,712,000 ft. Chestnut.
8,279,150 ft. Basswood and Buckeye.
1,500,000 ft. White Pine.
20,683,100 ft. Hemlock and Yellow Pine.
12,142,350 ft. Birch, Maple, etc.

101,159,600 ft.
112,000 cords pulp and tanning extract wood.
12,000 cords chestnut, oak and hemlock bark.
15,000 acres land, store building and employes' houses.
3 double circular mills and one band mill.
20 miles 3-ft. gauge, 30-lb. steel railway.
2 Climax locomotives, 30 cars, 2 log loaders.

This is one of the finest bodies of original growth hardwoods in the South, and lies on the slopes of the Unaka and Snowbird Mountains, and is easily worth half a million dollars, but must be sold to settle an estate. Address

BOX 97, Andrews, Cherokee County, N. C.

LUMBER FOR SALE

FOR SALE

200,000 ft. No. 1 two-inch oak bridge or platform plank, such as International Harvester Co. uses. Also 100,000 ft. No. 2 two-inch oak bridge plank. N. BUTLER HAYNES TIMBER CO.,
Memphis, Tenn.

FOR SALE—THE ENTIRE CUT OF

my mill, just beginning in virgin forest of post oak, red and white oak and pine. Will make an attractive price to some one to take entire cut. W. C. BYINGTON, Fountain Hill, Ark.

DIMENSION STOCK WANTED

WANTED—RED AND WHITE OAK

bending strips. Ask for specifications. Also plain and quartered white oak strips, 1x3"x3½"—6', 7', 12', 14'. Quote delivered prices.

JAMES MADISON, New Palestine, Ind.

WANTED—HARD MAPLE SQUARES

3½x4½", 4x5", 4½x5½", 5x6" and 6x6". Lengths 6", 7", 8, 12 and 14 ft. No. 1 common and better grade. Highest cash price paid. Also 1" white basswood x 4" and up wide, 8 to 16 ft. long. Write us today. HALL BROS.,
174 Mutual St., Toronto, Ont.

WANTED

DIMENSION OAK
Plain and Quartered

Various sizes for chair and table factories.
Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,
New York.

WANTED

Hard Maple and Beech Squares 42", 44", 48" long, plump 1" x 1". Must be clear and straight. If you have any to offer write us. Will take them dry or green.

THE COLUMBIA MFG. CO.,
New Philadelphia, Ohio.

LUMBER WANTED

LUMBER WANTED

Quote delivered Philadelphia, Pa., on
2 cars 8/4 sound wormy & 2 Com. Chestnut.
1 car 4/4 sound wormy & 2 Com. Chestnut.
1 car 6/4 No. 2 Common Poplar.
3 cars 4/4 Box White Pine.

Shipper to invoice direct. Name prices on any stock you desire to move.

CHARLES C. CROSS, Philadelphia, Pa.

WANTED—ONE MILLION FEET

4/4 No. 1 and No. 2 common or log run ash. Also all other thicknesses log run or straight grades. Quote prices f. o. b. shipping point.

W. E. HEYSER LBR. CO., Cincinnati, O.

WANTED

5/4 and 8/4" log run Cherry. Also other thickness. Cherry logs. 4/4" No. 3 common hardwoods, any kind. Also clear Hard Maple axles 4½"x5½"x6' long.

WARREN ROSS LUMBER CO., Jamestown, N. Y.

WANTED FOR CASH

less 2% discount, 20 cars 3" Hard Maple, all grades, green or dry. Mill inspection if desired. Can also use some 6/4".

CYRUS C. SHAFER, South Bend, Ind.

SOFT ELM

7/8x4¼x18
7/8x8¼x26½

ELM, ASH OR HICKORY

1¼x1⅝x40
1½x1½x40

OAK

2x2x30—28—25
1½x1½x40—24, 20—18
1x4x20—17—12
1¼x4x19
1x1x19

Address "BOX 43," care HARDWOOD RECORD.

WANTED

5 cars 4/4" 1sts & 2nds Brown Ash, Dry.
1 car 5/8" 1sts & 2nds Brown Ash, Dry.
1 car 8/4" 1sts & 2nds Brown Ash, Dry.
1 car 5/4" 1sts & 2nds Brown Ash, Dry.
Quote prices delivered Boston, Mass.

PLACE BROTHERS, INC.,
131 State Street, Boston, Mass.

WANTED

500,000 feet 4/4" sound wormy Chestnut, dry. Quote cash price Boston rate of freight. State when you could commence and complete shipment. Address, "BOX 37," care HARDWOOD RECORD.

WANTED TO BUY

100,000 feet 4/4, 5/4 and 6/4 log run Butternut.

DUHLMEIER BROTHERS, Cincinnati, O.

BUSINESS OPPORTUNITIES

FOR SALE—FINE 15,000

capacity sawmill, with 1,000,000 ft. standing timber. Steam and water power. Rigged for cutting hardwood dimension stock. Address

FRANK MILLER, Florence, Wis.

FOR SALE—A WELL EQUIPPED

basket and veneer plant, well located for timber, shipping facilities and the sale of its products for which there is an unlimited demand. We believe from our year's experience as manager of this factory we are offering you a good business proposition. Any information desired, cheerfully given. Address J. E. LAWRENCE, Receiver, THE LEXINGTON VENEER CO., Lexington, Ohio.

FOR SALE—WHOLESALE AND RETAIL

lumber and building material yard, located in fast growing town in the heart of the eastern Kentucky coal fields, on two trunk line railroads. Distributing point for Ky., Tenn. and Va. Price and terms right. For particulars address

BOX 578, Middlesborough, Ky.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

MACHINERY FOR SALE

LOCOMOTIVES FOR SALE

2 18-ton Climax 3 ft. gauge locomotives;
One 6 ft. Smith, Myers & Schnier band mill;
One 75 ton H. P. Corliss engine.

J. H. NORTHRUP, Louisa, Ky.

GANG RIP SAWS

One—30" American "Hoyt" Fig. 547 hardwood power-feed gang edger and ripper, complete with eight saws and countershaft, weight 4,100 lbs. Price f. o. b. Fort Wayne..$275.00

One—30" Berlin Machine Works No. 267 hardwood power-feed gang edger and ripper, complete with eight saws and counter-shaft. Price f. o. b. Fort Wayne.....$225.00

Both machines like new—no patched, worn or broken parts. Terms one-fourth with order, balance on delivery, subject to inspection.

ARCOLA STAVE CO.,
Arcola, Ind.

VENEER MACHINE FOR SALE

One Coe 76-inch heavy rotary veneer machine, with knife grinder. Used less than 30 days.

W. C. P. & O. CO., Ottawa, Ill.

BARGAIN IN

BOILERS AND ENGINE

1 300 H. P. Locomotive. Fire box boiler, 125 lb. working pressure allowed by Hartford Ins. & Insp. Co. 60 ft. 44" stock.
1 14x20 self-contained Automatic Brownell Engine.
2 60" Horizontal tubular boilers.
Also
1 50" Shaving Exhaust Fan.
42 ft. 10" Steam Feed.
Full specifications furnished on application.

JOHN S. OWEN LUMBER COMPANY,
Owen, Wisconsin.

WE WANT TO BUY

HARDWOODS OF ALL KINDS

FOR INTERIOR FINISH

No. 1 Oak Wagon Stock, Hickory and Maple Axles, Tongues, Reaches and Bolsters, Hickory and Oak Bending Stock, Etc.

ADDRESS DEPT. "L"

D. ACKLAND & SON, LTD., WINNIPEG, MAN., CANADA

Special Inducements TO Wood Working Plants

We know of several very desirable locations for Wood Working plants near to the country's greatest source of hard woods and where prices are the lowest in America.

Ample labor, low priced power and excellent transportation facilities go to make these openings very desirable.

Extra inducements as free sites, tax exemption or stock subscriptions will be given manufacturers of good faith and ability.

Our free services are at your command in aiding you to find a favorable location.

M. V. Richards
Land and Industrial Agt.

SOUTHERN RAILWAY
Room 305 Washington, D. C.

CHICAGO

Osgood & Richardson

935 Peoples Gas Bldg.

NORTHERN AND SOUTHERN HARDWOODS

Chicago Agents: LAMB-FISH LUMBER CO.

E. B. NETTLETON

Southern Hardwoods

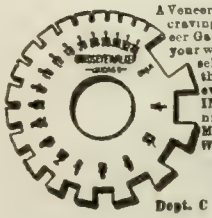
Pacific Coast Woods and Box Shooks

FISHER BUILDING CHICAGO

E. H. KLANN LUMBER CO.

Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

819 FISHER BLDG. HAR. 1187



A Veneer Gauge is the answer to a Veneer User's craving for years. This "Walker Brand" Veneer Gauge is a steel gauge that will satisfy your wants for all time. You can't do yourself a better turn than to buy one of these gauges. It gauges ACCURATELY every thickness from 1-40 inch to ⅝ inch INCLUSIVE. Wake up to this opportunity. Price only $1.98 delivered by U. S. Mail. Order now, today. Address—6456 Woodlawn Ave. Phone Hyde Park 33.

Dept. C BIRD'S EYE WALKER CHICAGO

99% PURE

SILICA

OR SILEX FOR WOOD FILLERS

TAMMS SILICA CO., 19 So. 5th Ave., Chicago

COUNTERFEIT CHECKS

are frequent except where our

Two Piece Geometrical Barter Coin

Is in use, then imitation isn't possible. Sample if you ask for it.

S. D. CHILDS & CO. Chicago

We also make Time Checks, Stencils and Log Hammers.



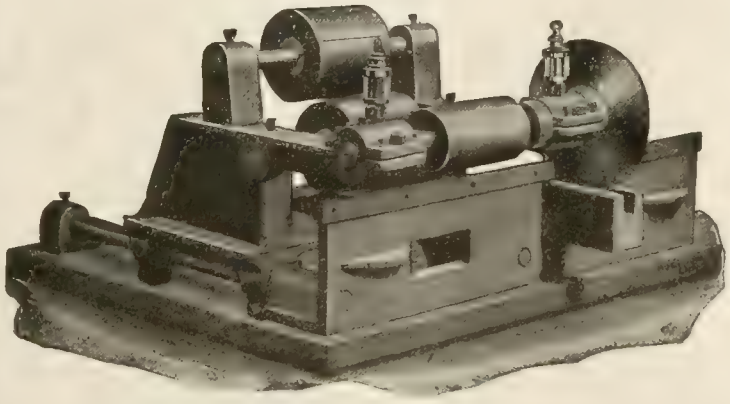
Gerlach Modern Machines

COOPERAGE STOCK and BOX SHOOKS

Circular, Band and Cylinder Saws
SAW AND LOG TOOLS

THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

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BUTTING SAW
for
Flooring Factories

For cutting out defects and making square and smooth ends for end-matching machines. Used by the largest producers. Write for particulars and prices.

Manufactured by
Cadillac Machine Co.
CADILLAC, MICH.

The CHEAPEST HARDWOOD LOGGING
IS DONE WITH



IF YOU WANT THE BEST SYSTEM OF ACCURATELY TALLYING AND RECORDING LUMBER SHIPMENTS OR RECEIPTS

YOU WILL BE INTERESTED IN

The Gibson Tally Book

This system of tallying lumber is employed by more than two thousand lumber producers, jobbers and wholesale consumers, and is available for tallying lumber, logs, flooring, dimension stock and all other commodities.

Makes three original tallies without the use of loose carbon sheets.

New Catalogue showing twenty-six various forms of tickets sent free on request.

Tally Book Dept., Hardwood Record, Chicago



This New CLYDE Overhead Cableway Skidder Saves $74.67 a Day in Labor Alone!!

In an actual test recently conducted on the Smoky Mountains, it cost, **on an average taken over three consecutive weeks,** $14.75 for a day's labor with six men to get 25,725 feet of logs with this new CLYDE, while it cost $89.42 for three and a third days' labor with ten men to get 25,725 feet of logs with a big fifteen thousand dollar machine working under exactly the same conditions.

The difference is $74.67 a day in favor of the new CLYDE OVERHEAD — that's $23,371.71 a year, more than two and a half times the cost of this new machine for mountain logging.

Of course, the first cost of a CLYDE OVERHEAD SKIDDER is low, we admit that—it's less than two-thirds that of the machine it was tried out against.

Let us send you full details of this remarkable showing and of the machine that accomplished it!

CLYDE IRON WORKS

LARGEST MANUFACTURERS
of
PROVENLY EFFICIENT LOGGING MACHINERY IN THE WORLD

"A Machine for EVERY Logging Operation"

Home Office and Factory:
Duluth, Minn., U. S. A.

SIMONDS SAWS

This illustration suggests just four of the kinds of Saws which may interest you. Our factories manufacture every kind of a Saw used around a wood-working plant or sawmill.



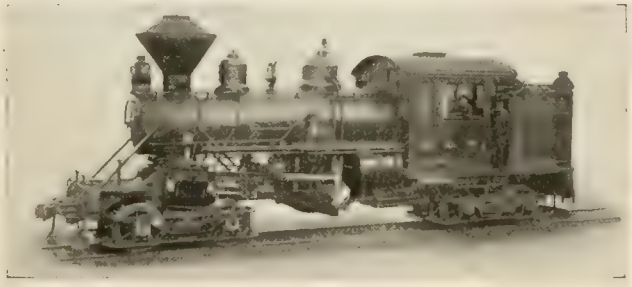
Our aim has always been to supply Saws and Wood-working Machine Knives that will give the maximum service and at the same time do the finest kind of work with the least amount of care. Obtaining these results is the work of experience — and we have been doing it eighty years.

Simonds Manufacturing Company

Fitchburg, Mass.	Chicago, Ill.	Montreal, Que.
New York City	New Orleans, La.	Seattle, Wash.
Portland, Ore.	San Francisco, Cal.	London, Eng.
Vancouver, B. C.	Lockport, N. Y.	St. John, N. B.

Baldwin Geared Locomotives

are built for severe service on steep grades, sharp curves and uneven tracks.



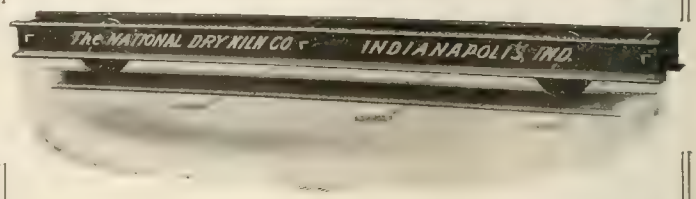
They are symmetrical in construction, with central drive and gears of selected material.

Further particulars will be gladly furnished on request

THE BALDWIN LOCOMOTIVE WORKS
PHILADELPHIA, PA., U. S. A.
Cable Address:—"Baldwin, Philadelphia"

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New York, N. Y., Hudson Terminal; St. Louis, Mo., Wright Building;
Chicago, Ill., Railway Exchange; Portland, Ore., Spalding Building;
Richmond, Va., Travelers Building.

Kiln Truck

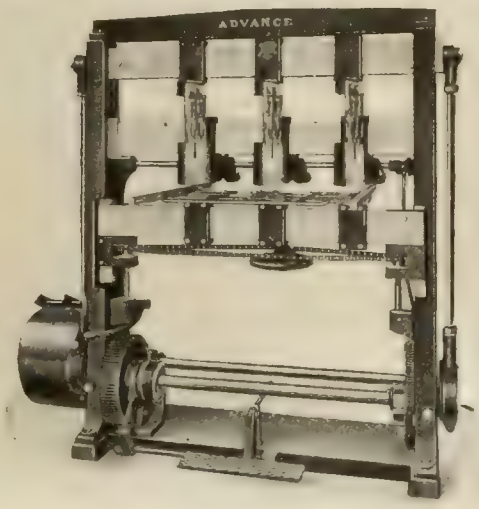


We make all styles of Kiln Trucks, Transfer Cars. They are roller-bearing, steel or malleable iron wheels. We have one contract for 4,500 6½′ trucks.

Always a large stock of material on hand. Can make prompt shipment.

The National Dry Kiln Company
Indianapolis, Indiana

Wire Stitching Machinery



FOR
Crates, Veneer and Resawed Lumber Boxes, Also Wire and Metal Bound Boxes,
FRUIT PACKAGES, BASKETS, FIBER SHIPPING CASES, PAPER BOXES AND SPECIAL PURPOSES
ASK FOR CATALOGUE
Manufactured by
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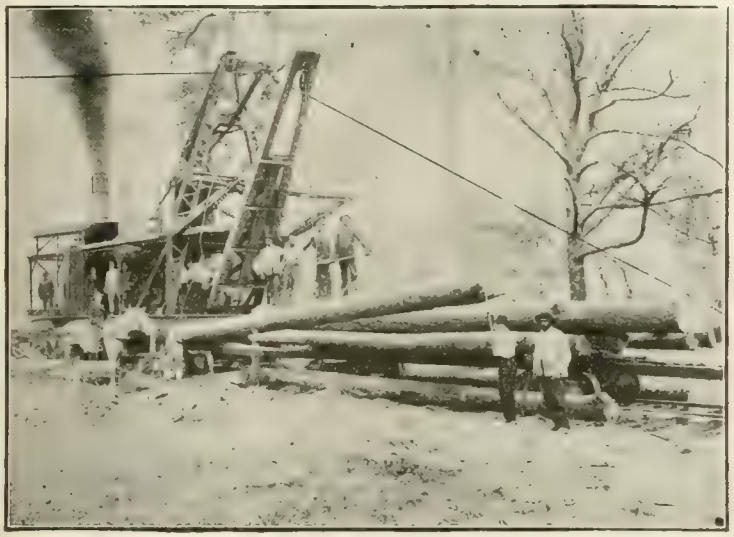
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AIR DRILL AND AIR TOOL HOSE
STEAM WATER SUCTION
EXTRA QUALITY



Recommended for hard service and guaranteed to do the work

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ALBANY MILL SUPPLY CO., ALBANY, GA.

THE MECHANICAL RUBBER COMPANY
(Chicago Rubber Works)
307 W. Randolph Street, CHICAGO
ESTABLISHED 1882



THE RUSSEL COMBINED SKIDDER AND LOADER IN OPERATION

Russel Logging Cars are built to stand severe service, of any capacity desired or to suit any length of log.

Logging Economy

will interest you

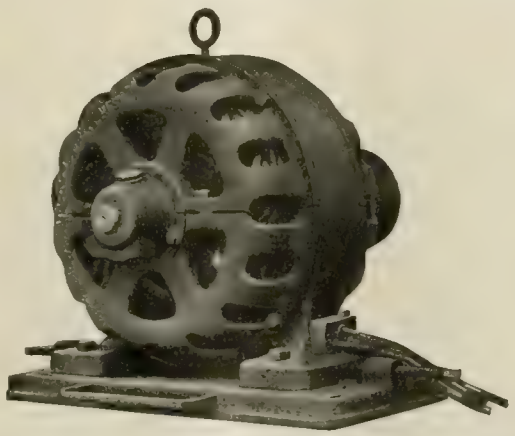
The most convincing proof of any machine's efficiency, next to a personal trial, is the expression of those who have used them.

We shall be pleased to furnish you with the proofs or the names of the operators who will be glad to show you the machines in operation.

The Russel Combined Skidder and Loader has demonstrated itself to be superior in design and construction. The great decrease in cost and increased efficiency of logging is bound to appeal to the operators.

Russel Wheel & Foundry Co., Detroit, Mich.

Westinghouse Motors form the Reliable Drive for Wood-Working Plants



AFTER Westinghouse motors are properly installed in a wood-working plant, the only attention they require is an occasional cleaning, inspection and lubrication. Beyond this, there is nothing to be done.

They are ready to start any moment they are wanted and they keep the machines they drive in continuous operation until the power is shut off. They are very rarely out of commission for repairs. Their life is very long; some of the first Westinghouse motors are still in successful operation.

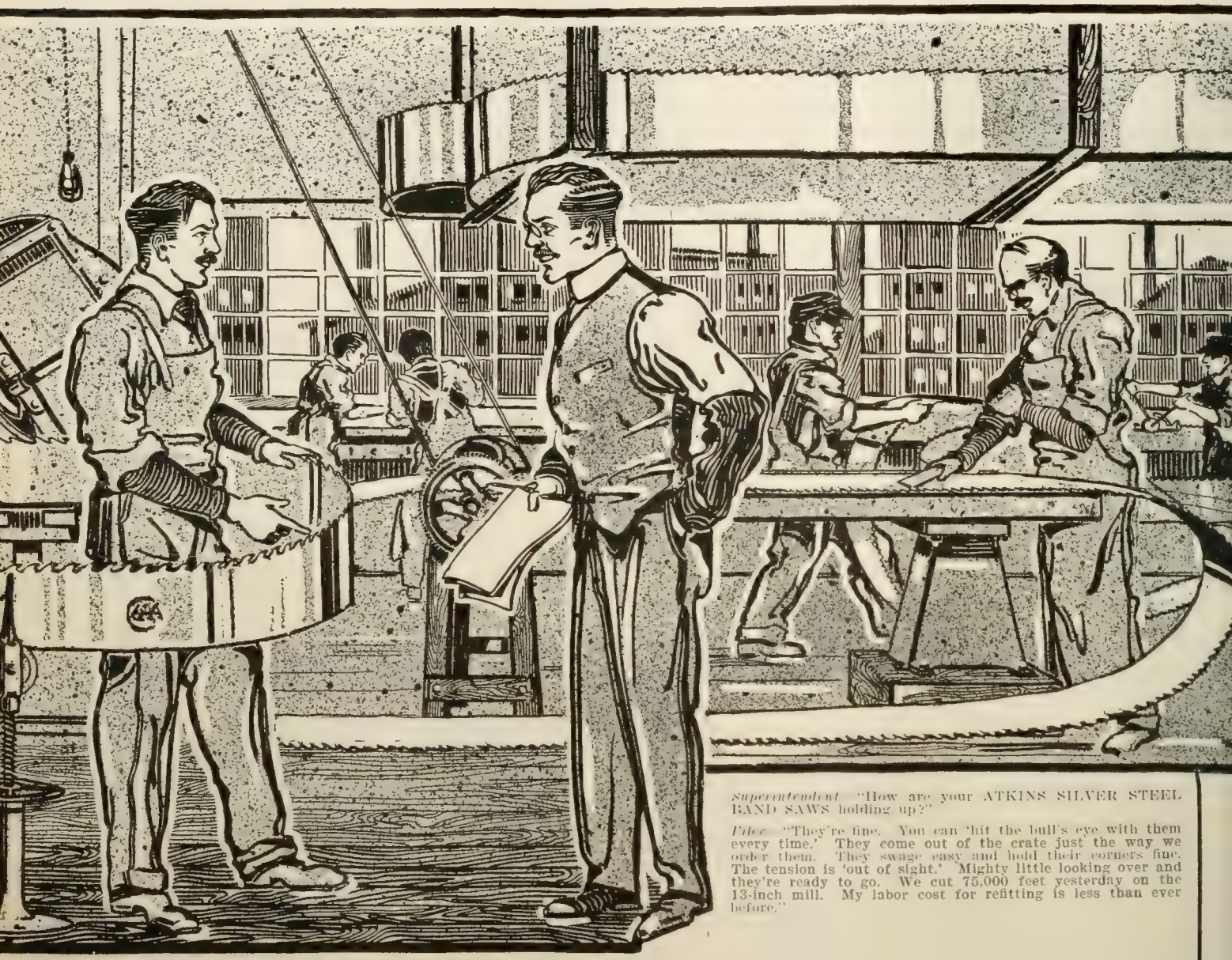
Such reliability is the result of long experience in design, thorough study of operating conditions, and great care in manufacture. These factors combine to make Westinghouse motors more reliable than the service conditions, for which they are intended, require.

Of course, like any other machines, these motors must be properly installed. Westinghouse service takes care of this detail by giving full information on the installation of Westinghouse motors in any plant.

To receive full assurance of motor reliability, specify "Westinghouse Motors."

Westinghouse Electric & Mfg. Co., East Pittsburg, Pa.

Sales Offices in all Large Cities.



Superintendent—"How are your ATKINS SILVER STEEL BAND SAWS holding up?"

Filer—"They're fine. You can 'hit the bull's eye with them every time.' They come out of the crate just the way we order them. They swage easy and hold their corners fine. The tension is 'out of sight.' Mighty little looking over and they're ready to go. We cut 75,000 feet yesterday on the 13-inch mill. My labor cost for refitting is less than ever before."

This is an actual conversation that took place in one of the largest mills in the country.

SAWS LIKE THESE ARE GOOD ENOUGH FOR THE MOST PARTICULAR

ATKINS SILVER STEEL SAWS

are making good where quality and results are appreciated. You owe it to yourself to give these Famous Saws an early trial. Let your next Saws be ATKINS. When you order, specify ATKINS SILVER STEEL SAWS—that's all. Write to the nearest address below.

ATKINS ALWAYS AHEAD!

Band Saws, Circular Saws, Gang Saws, Cross Cuts, Edger Saws

A PERFECT SAW FOR EVERY PURPOSE

ATKINS MACHINE KNIFE FACTORY at Lancaster, N. Y.

E. C. ATKINS & CO., Inc.

The Silver Steel Saw People

Home Office and Factory, Indianapolis, Ind. Canadian Factory, Hamilton, Ont.

Branches carrying complete stocks for immediate delivery in the following cities. Address E. C. ATKINS & CO.

ATLANTA, CHICAGO, MEMPHIS, MINNEAPOLIS, NEW ORLEANS, NEW YORK CITY, PORTLAND, SAN FRANCISCO, SEATTLE, VANCOUVER, B. C., SYDNEY, N. S. W.

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B. C. JARRELL & CO.

MANUFACTURERS OF

High Grade, Rotary-Cut Gum

VENEERS

Cut right; dried right; prices right

HUMBOLDT, - TENNESSEE

Hoffman Brothers Company

Sliced and Sawed, Quartered and Plain Red and White Oak

Walnut Cherry Ash Maple

Let us Send You Our Stock List FORT WAYNE, IND.

Memphis Veneer & Lumber Co.

Memphis, Tenn.

Mahogany Veneer

1-8, 3-16 and 1-4-in. door stock.
1-20 and 1-16-in. sawed mahogany.

Sawed Veneer in the following

Quartered White Oak,
Quartered Red Oak,
Plain Red Oak,
Yellow Poplar,
White Ash and
Quartered Red Gum

Memphis Veneer & Lumber Company

Memphis, Tennessee

"SOVEMANCO."

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard. LOUISVILLE, KY. Mills, Magnolia, Standard and 21st Sts.

Both Ends and the Middle

HARDWOOD RECORD reaches most everybody who produces markets and consumes Hardwoods.

Nothing But Hardwoods

The Central Veneer Co.

SOFT YELLOW POPLAR
CROSS BANDING

Huntington, West Virginia

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.



WE manufacture all kinds of panels from the various woods usually used for that purpose.

We lock-joint all our lumber cores, and use every other means of making our product as perfectly as it can be made.

We ask only that you send your inquiries—our stock will almost sell itself after you have seen it.

AUTO DASHES, TOPS and PANELS
CHAIR BACKS and SEATS

THE WISCONSIN SEATING CO., New London, Wis.

HOWARD HANSON, President **THOMAS A. TURNER, Secy. and Treas.**

THE HANSON-TURNER COMPANY

MANUFACTURERS OF

ROTARY CUT VENEER AND THIN LUMBER

ELM **OAK** **BIRCH**
BEECH **MAPLE** **BASSWOOD**
CURLY BIRCH **BIRD'S-EYE MAPLE**

SPECIALTIES:
DRAWER BOTTOMS BACK PANELS CENTER STOCK
BACKING PIANO PIN BLOCKS BIRCH DOOR STOCK
CURLY BIRCH BIRD'S-EYE MAPLE

OFFICE and FACTORY at WELLS, N. Y.

For Veneer and Panel Manufacturers

Your Consumers' Lists Cost You BIG MONEY

We can save it all and relieve you of all the detail and effort necessary to tabulate consumers' wants. **Our Card Index System of those wants,** just out, is the result of systematic effort. It is endorsed by your competitor.

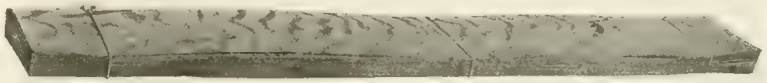
Can You Afford to Give Him that Advantage?

HARDWOOD RECORD CHICAGO

VENEERS AND PANELS

OUR SPECIALTY

Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.

ROACHDALE, IND.

H. I. CUTSINGER, Gen'l Mgr.

Custom Mill Work, Storage, Inspection

ON

Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co. Long Island City, New York

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co. ***Wausau, Wis.***

CIRCASSIAN MAHOGANY

Logs VENEERS Lumber

WE IMPORT WE MANUFACTURE

All Thicknesses of Mahogany
Ready for Shipment

RICE VENEER & LUMBER CO.

GRAND RAPIDS, MICH.

ESTABLISHED 1869

Adams & Raymond Veneer Co.

INDIANAPOLIS, INDIANA

MANUFACTURERS OF PLAIN & FIGURED VENEERS

CIRCASSIAN / AMERICAN WALNUT

QUARTERED OAK

ANY WOOD

ANY THICKNESS

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

Boice Lumber Co., Inc.

Southern Hardwoods

MAIN OFFICE
RICHMOND, VIRGINIA

Yards: NORFOLK, ABINGDON, GRAHAM, VA., and NORTH WILKESBORO, N. C.

Our Corps of Inspectors

Intelligent! Highly Trained!
Conscientious!

Is assurance that you will get what your order calls for when you buy Gum from us.

Himmelberger-Harrison Lumber Company

Cape Girardeau, Missouri

Carolina Spruce Co.

MANUFACTURERS

SPRUCE & HARDWOOD

Mills: Pensacola, N. C. LUMBER *Capacity* 90,000 ft. per day

4 cars 4/4 No. 1 Common Poplar	1 car 4/4 1 & 2 Poplar
3 cars 4/4 No. 2 Com. A Poplar	2 cars 5/4 No. 1 Com. & Bet. Poplar
1 car 4/4 Clear Sap Poplar	1 car 4/4 1 & 2 Basswood

Charles K. Parry & Co. Sole Selling Agts. Land Title Bldg. Philadelphia

Louisiana Long Leaf Lumber Co.

Fisher, Louisiana

Diamond 4 L Co. Brand

OAK FLOORING

A GUARANTEE OF PERFECTION

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

We will name very attractive prices on a few cars of each of the following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4/4 and 8/4 Sap Poplar.
1¼", 1½" and 2½" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23" and 24" and up.
4/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

Cherokee Lumber Co.

For the next thirty days we want to move Quartered White Oak and Chestnut and would appreciate your inquiries for attractive prices.

NASHVILLE, TENN.

SECURE BETTER PRICES

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

ASK US ABOUT IT

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

Frank Purcell Kansas City U. S. A.

Exporter of Black Walnut Logs

JO MARK

FIGURED WALNUT IN LONG WOOD AND STUMPS

Salt Lick Lumber Co.

SALT LICK - - - - KENTUCKY

MANUFACTURERS OF

Eureka OAK AND BEECH **Oak Flooring**

Complete stock of 3/8" and 13/16" in all standard widths

William S. Whiting

MANUFACTURER AND WHOLESALER

WHITE PINE
BASSWOOD
BIRCH
BUCKEYE
CHESTNUT
MAPLE
POPLAR
OAK

ASHEVILLE, N. C.

WE HAVE IT

W. W. DEMPSEY

Manufacturer and Wholesaler of

HARDWOODS

CHERRY
1 Car 4/4 Log Run Mill Cull Out,

OAK
84,000 ft. 4/4 Log Run Quartered.

CYPRESS
250,000 feet of 4/4 No. 1 Common & Better. Old grading.

SPRUCE
4/4 and 8/4 Clear and Select, 8/4 Box.

BAND SAWED STOCK

A LINE BRINGS PRICE BY RETURN MAIL

General Offices Johnstown, Pa.

New York Office No. 18 Broadway

WE MANUFACTURE AND DEAL IN

TIES, HARDWOOD LUMBER AND TIMBER

We want to buy a large amount of 4/4, 8'—8'6" Oak from Tie Sides

Hill Bros. Tie & Lumber Company

Charleston, W. Va.

Baker-Matthews Manufacturing Co.

Sikeston, Mo.

Band Sawn Southern Hardwoods

SPECIALTIES

RED GUM, PLAIN OAK

SEND US YOUR INQUIRIES

"WE ARE GETTING RESULTS"

WRITES ONE ADVERTISER

This Means That He Is Getting

NEW BUSINESS

Through His Ad

If we can do it for him is there any logical reason why we can't for you?

MAKE US PROVE IT

HARDWOOD RECORD, CHICAGO

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg. ST. LOUIS

MANUFACTURERS

Three Mills

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - WELLS, MICHIGAN

"Chief Brand" Maple and Beech Flooring

in 3/8, 5/8 and 13-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

For the Better Kind of Hardwoods

write

EAST JORDAN LUMBER CO.

East Jordan, Mich.

ALL THE MICHIGAN HARDWOODS

Makers of

LATH SHINGLES — **Imperial Brand** MAPLE FLOORING — PINE AND HEMLOCK

FORMAN'S FAMOUS OAK FLOORING

Is made in faultless fashion from the most uniform-colored and even-textured oak produced; worked from Kraetzer-Cured lumber manufactured at our Heidelberg, Ky., sawmills.

Thomas Forman Company

Detroit : : : : : Michigan

Von Platen Lumber Co.

Iron Mountain, Michigan

MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

100 M Ft. 4/4 No. 1 and 2 Common Birch.
50 M Ft. 5/4 No. 1 Common Birch.
50 M Ft. 5/4 No. 2 Common Birch.
100 M Ft. 5/4 No. 1 and 2 Common Maple.
100 M Ft. 6/4 No. 1 and 2 Common Maple.

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

For Prompt Shipment

Basswood—100,000 ft. 5/4 No. 2 Common & Better.
Soft Maple—25,000 ft. 4/4 & 8/4 Log Run M. C. O.
White & Red Oak—12,000 ft. Log Run M. C. O.
Black Walnut—3,000 ft. Log Run M. C. O.

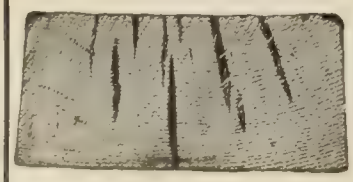
STRUTHERS COOPERAGE CO., Romeo, Michigan

S. L. EASTMAN FLOORING CO.

SAGINAW BRAND

MAPLE FLOORING

SAGINAW, MICH.

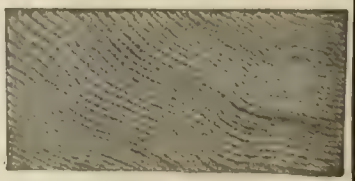


Lumber Dried As Never Before

SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN

GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN



BUFFALO

The Foremost Hardwood Market of the East

BUFFALO HARDWOOD LUMBER CO.
We want to buy for cash
OAK, ASH AND OTHER HARDWOODS
All grades and thicknesses.
Will receive and inspect stock at shipping point
Branch yard, Memphis, Tenn.
940 Seneca Street, BUFFALO

Hugh McLean Lumber Co.
OUR SPECIALTY:
QUARTERED WHITE OAK
940 ELK STREET

T. SULLIVAN & CO.
SPECIALTIES:
Gray Elm, Brown Ash
Pacific Coast Fir and Spruce
2 ARTHUR STREET

ORSON E. YEAGER
SPECIALTIES
Oak, Ash and Poplar
932 ELK STREET

ANTHONY MILLER
HARDWOODS OF ALL KINDS
893 EAGLE STREET

G. ELIAS & BRO.
HARDWOODS
White Pine, Yellow Pine, Spruce, Hemlock, Fir, Lumber, Timber, Millwork, Boxes, Maple and Oak Flooring
955-1015 ELK STREET

I. N. Stewart & Bro.
Specialties
Cherry and Oak
892 Elk Street

Standard Hardwood Lumber Co.
OAK, ASH and CHESTNUT
1075 Clinton Street

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant, Kitchen & Company

Manufacturers Old-Fashioned Soft Yellow Poplar

5-8 and 4-4 in Wide Stock, Specialty

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

YOU pay a *little* more for our hardwood lumber than you do for many others', but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer, let's get acquainted.

LITTLE RIVER LUMBER COMPANY **Townsend, Tenn.**

W. H. White Company
Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.
Sales Office: BUFFALO, N. Y.

STOCK DRY—STANDARD GRADES—BEST MANUFACTURE—CAR OR CARGO SHIPMENTS

WE OFFER
All Kinds
OF
Hardwood and Hemlock
Lumber
Hardwood
Flooring, Lath
AND
Dimension Stock

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED
POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD

HARDWOOD MANUFACTURERS ASSOCIATION OF THE U.S.

SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Hardwood Record

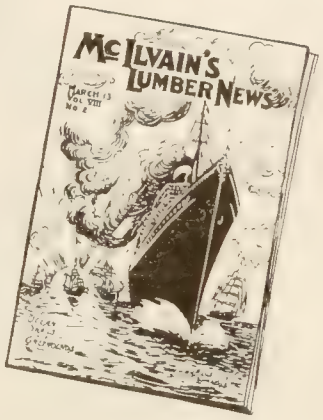
Eighteenth Year, Semi-Monthly.

CHICAGO, MAY 25, 1913

Subscription $2. Single Copies, 10 Cents.



ADVERTISERS' CLASSIFIED DIRECTORY FOLLOWS READING MATTER.



¶ When we say every month that we are always glad to be tested on rush orders, we mean just this, exactly.

¶ Never hesitate to call on us when you want the goods in a hurry.

¶ Prompt delivery is the "McIlvain Way."

Look over this month's "Lumber News"—If it is not on your desk, drop us a postal—it will be sent by return mail.

J. GIBSON McILVAIN & CO.

1420 Chestnut Street **Philadelphia, Pa.**

HOLLOWAY HARDWOODS

The following Stock is band-sawn and runs

60% 14′ and 16′

1 car 5/4″ x 11″ & wider 1s & 2s Plain Red Oak

10 cars 4/4″ x 6″ to 12″ 1s & 2s Cottonwood

5 cars 4/4″ x 13″ and wider 1s & 2s Cottonwood

5 cars 4/4″ No. 1 Common Cottonwood

Holloway Hardwood Lumber Co.
20 W. Jackson Blvd. Chicago

Cartier-Holland Lumber Company

SPECIAL WHITE FURNITURE STOCK

We offer the following winter sawed high-grade End Cured White Maple. Same will be in shipping condition during May and June. Get your inquiry to us at once.

120,000′ 1″ End Cured White Maple
35,000′ 2″ End Cured White Maple

A POSTAL TO US TODAY WILL BRING YOU PRICES WITHOUT DELAY

Ludington Michigan

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

BASSWOOD

We Offer for Prompt Shipment

150,000 Feet

Dry 1 x 7 and wider Basswood Firsts and Seconds. Run about 75% clear, the defects are small and the stock is very bright and nice.

ESTIMATED WIDTHS

7 and 8 inch	34%
9 and 10 inch	35%
11 and 12 inch	27%
Wider than 12 inch	4%

ESTIMATED LENGTHS

6 and 8 feet	8%
10 and 12 feet	20%
14 feet	20%
16 feet	49%
Odd lengths	3%

May 25, 1913

COBBS & MITCHELL, Inc.

Sales Department

CADILLAC MICH.

Mitchell Brothers Co.

Sales Department

Cadillac, Mich. **May 10, 1913**

Dry Michigan Hardwoods

1x4 Basswood No. 1 Common	11 M
4/4 Cadillac Gray Elm 1s & 2s	25 M
1x6 Maple 1s & 2s	21 M
1x9 Maple 1s & 2s	16 M
4/4 White Maple, End Dried	16 M
5/4 White Maple, End Dried	4 M
4/4 Birdseye Maple, End Dried	3 M
4/4 Soft Maple, No. 2 Common & Better	9 M

WE MANUFACTURE A SPECIAL GRADE OF HARDWOOD FLOORING FOR FACTORY FLOORS

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

100,000 ft. 5 4 1st & 2nds Basswood

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

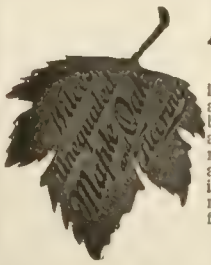
Ready for Shipment About June 1st

Ten cars
4/4 No. 1 Common & Better Birch
Five cars
6/4 No. 1 Common & Better Birch
Two cars
8/4 No. 1 Common & Better Birch
Two cars
4/4 No. 2 Common & Better Ash
Five cars
4/4 No. 2 Common S. Elm
Five cars
4/4 No. 3 Common Birch
Two cars
4/4 No. 3 Common S. Elm
Five cars
4/4 No. 2 Com. & Better Basswood

Above cut from virgin timber. Grade and manufacture are first class.

Mears - Slayton Lumber Co.
1237 Belmont Ave. Chicago, Ill.

J. RAYNER
VENEERED PANELS
ALL WOODS
SEND FOR STOCK LIST
MAHOGANY LUMBER
CARROLL AVE. AND SHELDON ST.
CHICAGO



A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company
22nd and Throop Sts. CHICAGO, ILL.

15,000,000 FEET ALWAYS ON HAND



Stop Burning Incense

to poor grades. **Save waste** and swell your dividends by buying hardwood lumber that is perfectly band-sawn from the finest timber that grows in Arkansas and Missouri. Our stock is of fine widths and lengths, **fat** thickness and the highest standard of grades.

"WISLUMBCO STANDARD"

50,000 ft. 4 4x6 to 9" 1st & 2nd Plain White Oak (Special).
12,000 ft. 6 4 1st & 2nd Pl. Red Oak.
30,000 ft. 6 4 No. 1 Common Plain Red Oak.
50,000 ft. 4/4 1st & 2nd Red Gum.
75,000 ft. 4/4 No. 1 Common Red Gum.
50,000 ft. 4 4x13 to 17" Box Board Gum.
60,000 ft. 4 4x13" & wider 1st & 2nd Sap Gum.
75,000 ft. 4 4x13 to 17" Box Board Tupelo.
30,000 ft. 4/4x13" & wider 1st & 2nd Tupelo.
75,000 ft. 4 4x6 to 12" 1st & 2nd Tupelo.
15,000 ft. 4/4x13 to 17" Wormy Box Board Tupelo.
50,000 ft. 4/4 Select Cypress.
75,000 ft. 4/4 Shop Cypress.
75,000 ft. 4/4 No. 1 Common Cypress.
50,000 ft. 4/4x18" & wider No. 1 & Panel Cottonwood.
75,000 ft. 4/4x13 to 17" Box Board Cottonwood.
50,000 ft. 4/4x9 to 12" Box Board Cottonwood.
75,000 ft. 4/4x13" & wider 1st & 2nd Cottonwood.
50,000 ft. 6/4 Log Run Soft Maple.
25,000 ft. 8/4 No. 2 Common & Better Hickory.

We also have a good stock of other Southern hardwoods

WISCONSIN LUMBER COMPANY
Mills: Huttig, Ark. Deering, Mo. Chicago

Estabrook-Skeele Lumber Co.

MANUFACTURERS AND DEALERS IN
Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood
WRITE US BEFORE SELLING

Fisher Building, - - - CHICAGO
'PHONE HARRISON 1984

Hayden & Westcott Lumber Co.
SPECIAL RAILROAD DEPT.
Hardwoods :: Softwoods
823 Railway Exchange Building, Chicago, Ill.

¶ For items of Hardwood Stock or Hardwood Machinery, you will find it advantageous to write our advertisers. Get in touch!

Every Sale an Advertisement

It has been well and truly said that every time a transaction is completed that is satisfactory in every way to the customer, a living advertisement has been created that will do more to bring results than any other kind.

It is equally true, of course, that the ad on the printed page, even in so good a medium as this, can do but one thing: arouse interest and get inquiries. If the sales following them do not turn out satisfactorily, then the advertising ceases to have effect.

That emphasizes the necessity, as a matter of business and as a condition of permanent advertising, of fair treatment of customers and adherence to a high standard of business dealings. No advertiser can long remain successful unless his goods are right and unless he handles his customers right.

We desire to call the attention of the trade to the fact that we have been advertising, as a club, for over four years; that we believe in advertising more than ever before, and that our publicity work is getting more results than ever before.

You can guess the answer.

The Louisville Hardwood Club

OHIO RIVER SAWMILL COMPANY
THE LOUISVILLE VENEER MILLS
LOUISVILLE POINT LUMBER CO.
NORMAN LUMBER COMPANY
Mills and Sales Office: Holly Ridge, La.
BOOKER-CECIL COMPANY
W. P. BROWN & SONS LUMBER CO.
EDWARD L. DAVIS LUMBER COMPANY

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO.

KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK

OUR SPECIALTY

MANUFACTURERS OF

QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER

BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER, Pres. — J. M. LOGAN, Gen'l Manager

C. C. CANNON, Vice-Pres. — C. R. SWANN, Sec'y and Treas.

J. M. LOGAN LUMBER CO.

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HARDWOODS AND PINE
POPLAR A SPECIALTY

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Branch Office and Yard:
Bank and McLean Ave., Cincinnati — I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.
RED OAK—Plain or Quartered.
CHESTNUT — BASSWOOD
POPLAR — WHITE PINE

Always carry large well assorted stock of all kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

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Manufacturers and Wholesalers

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Yard: Middlebrook Pike and Lonsdale Car Line

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3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR, OAK, CHESTNUT, WHITE AND YELLOW PINE, HEMLOCK BARK, ETC.

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MOUNTAIN VIRGIN HARDWOOD STUMPAGE

Kimball & Kopcke

Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

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"THE VERY BEST"

Red Birch

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

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THE GATEWAY OF THE SOUTH

WE WANT TO BUY
1", 1¼", 1½" 1s & 2s AND NO. 1 COMMON SAP GUM
1", 1½" & 2" 1s & 2s AND NO. 1 COMMON RED GUM
1" NO. 1 COMMON TUPELO.

SUBMIT US YOUR STOCK SHEETS
WITH BEST CASH PRICES

DUHLMEIER BROS.
CINCINNATI, OHIO

The Maley, Thompson & Moffett Co.

Veneers, Mahogany and Hardwood Lumber

Largest Stocks Best Selections

CINCINNATI, OHIO

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The W. E. Heyser Lumber Company
MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Grade West Virginia and Southern Hardwoods in stock at all times.

Shipments made direct from our own yards and mills in straight or mixed cars.

SEND US YOUR INQUIRIES

L. W. RADINA & CO.
DEALERS IN
POPLAR AND HARDWOODS
CINCINNATI : : OHIO

BENNETT & WITTE
10 cars 4/4 No. 1 Common Plain Red Oak
5 cars 4/4 No. 1 Common Plain White Oak
5 cars 5/8 1sts and 2ds Sap Gum.
10 cars 3/4 1sts and 2ds Sap Gum
20 cars 4/4 1sts and 2ds Red Gum.
10 cars 4/4 No. 1 Common Red Gum.
1 car 3" Plain White Oak, 1sts and 2ds.

Main Office
CINCINNATI, OHIO

SOUTHERN OFFICE, MEMPHIS, TENN.
EXPORT OFFICE, NEW ORLEANS, LA.

89%
of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

Eventually Why Not Now?
Eventually you will buy a carload of our Plain Oak and Quartered Oak or our Poplar—WHY NOT BUY IT NOW?

If our salesman does not call on you, send us a list of your requirements, and LET US quote you.

The Mowbray & Robinson Co., Cincinnati Ohio
Manufacturers Plain and Quartered Oak and Poplar Band Sawed Stock

Mills QUICKSAND, KY. WEST IRVINE, KY SOFT EASTERN KENTUCKY OAK

NOTICE

Our entire plant, including saw mill, lumber yard, etc., is located in the hills in Northern Mississippi, SEVENTY-FIVE FEET ABOVE THE HIGHEST WATER OF THE MISSISSIPPI RIVER, therefore insuring to our customers shipment of ABSOLUTELY DRY, CLEAN LUMBER AT ALL SEASONS OF THE YEAR.

We keep an assorted stock of over one million feet of high grades of all thicknesses in our dry shed besides our regular yard stock of from twelve to fifteen million, from which we can make prompt shipment.

We operate a Kraetzer Steam Preparator and battery of dry kilns with capacity of two carloads per day, which gives us facilities for filling orders promptly for special stock.

LAMB-FISH LUMBER COMPANY

CHARLESTON, MISSISSIPPI
U. S. A.

GOOD GRADES "STEARNS QUALITY LUDINGTON" PROMPT SERVICE

HARDWOOD SPECIALISTS

We have reached the height of perfection in the process of

END DRYING WHITE MAPLE

Our winter's cut is now ready for shipment. Send in your requisitions early before the supply is exhausted.



End Drying High-Grade Stock, Showing Protecting Strips on Edges of Boards

LIST OF DRY STOCK

5 cars 4/4 No. 1 and 2
3 cars 5/4 No. 1 and 2
3 cars 6/4 No. 1 and 2
4 cars 8/4 No. 1 and 2
3 cars 4/4 No. 1 and 2 Com.
1 car 5/4 No. 1 and 2 Com.
1 car 6/4 No. 1 and 2 Com.
2 cars 8/4 No. 1 and 2 Com.

The STEARNS SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

Our Specialties:

Cottonwood—Red and Sap Gum | **Oak** Plain and Quartered Red and White | **Three Ply Red Gum Panels**

A Few Items We Want To Move

10 cars 4/4" x 9" to 12" Cottonwood Box Boards.
5 cars 4/4" x 13" to 17" Cottonwood Box Boards.
10 cars 4/4" x 13" to 17" 1sts & 2nds Cottonwood.
5 cars 4/4" x 18" to 21" 1sts & 2nds Cottonwood.
3 cars 5/4" x 13" to 17" 1sts & 2nds Cottonwood.
1 car 6/4" x 6" & Up 1sts & 2nds Cottonwood.
3 cars 5/8" x 6" & Up 1sts & 2nds Sap Gum.
4 cars 4/4" x 13" to 15" 1sts & 2nds Sap Gum.
6 cars 4/4" x 6" & Up 1sts & 2nds Red Gum.
2 cars 5/4" x 4" & Up No. 1 Com. Red Gum.
1 car 6/4" x 4" & Up No. 1 Com. Red Gum.
2 cars 8/4" x 6" & Up 1sts & 2nds Plain White Oak.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY

Memphis — **BOX SHOOKS ann VENEERS** — **Tenn.**

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Cherokee Lumber Co.

For the next thirty days we want to move Quartered White Oak and Chestnut and would appreciate your inquiries for attractive prices.

NASHVILLE, TENN.

SECURE BETTER PRICES

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

ASK US ABOUT IT

We will name very attractive prices on a few cars of each of the following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4/4 and 8/4 Sap Poplar.
1¼", 1½" and 2½" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23" and 24" and up.
4/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

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Hardwood Lumber

Nashville, Tenn.

THE EAST

BOSTON NEW YORK PHILADELPHIA

WM. WHITMER & SONS
INCORPORATED

Manufacturers and Wholesalers of All Kinds of

"If Anybody Can, We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg. PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building PITTSBURG, PA.

We Know How to fill your orders for all kinds of HARDWOODS, WHITE PINE, YELLOW PINE, SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.
Give us a trial.
THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

JONES HARDWOOD COMPANY
33 Broad Street, Boston, Mass.
Birch, Maple and Beech

For Quick Shipment
1 car 4/4 1s and 2s Chestnut.
2 cars 4/4 No. 1 Common Chestnut.
1 car 4/4 1s and 2s Red Oak, 16" and up wide.
1 car 4/4 Common and Better Quarter Sawed Red Oak.
Inquiries Promptly Answered
DANIEL B. CURLL, REAL ESTATE TRUST BLDG., PHILADELPHIA, PENNA.

CHARLES HOLYOKE
141 MILK STREET, BOSTON, MASS.
HARDWOODS

BEECHER & BARR
OAK CHESTNUT POPLAR
WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM. HARDWOOD FLOORING.
442 LAND TITLE BLDG. PHILADELPHIA, PA.

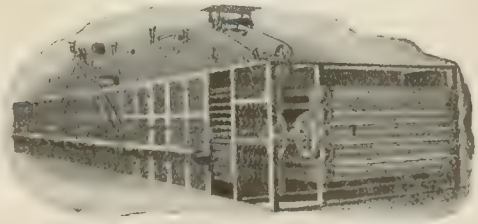
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WM. E. LITCHFIELD
MASON BUILDING, BOSTON, MASS.
Specialist in Hardwoods
Manufacturers are requested to supply lists of stock for sale

West Virginia Hardwoods
WHITE ASH, WHITE OAK, POPLAR, CHESTNUT, Etc.
If in the market let us have your inquiries and we will quote you attractive prices, and guarantee to ship correct high grade
AMERICAN LUMBER & MFG. COMPANY, Pittsburgh, Pa.

PROCTOR **VENEER DRYER** FIREPROOF
—AN—
UNPARALLELED SUCCESS

No Splitting Nor Checking
No Clogging Nor Adjusting



Recommended by all those who have tried it

THE PHILADELPHIA TEXTILE MACHINERY COMPANY
DEPT. L HANCOCK & SOMERSET STS. PHILA., PA.

If You Knew

What our BULLETIN SERVICE was doing for your competitor in the lumber business, you'd not only want the service yourself, but YOU'D HAVE IT.

Let Us Tell You About It.

Hardwood Record :: Chicago

THE EAST

LEADING MANUFACTURERS AND JOBBERS

W. P. Craig Lumber Co.

Wholesale Hardwood and Building Lumber

Empire Building, :: PITTSBURG, PA.

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WE CAN MAKE PROMPT SHIPMENTS.

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21 Besse Place, Springfield, Mass.

H. D. WIGGIN 89 STATE STREET BOSTON, MASS.
MANUFACTURER HARDWOOD LUMBER
Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple
Mill at Stone Coal Junction, West Virginia

J. & J. VINKE
Agents for the Sale of
AMERICAN HARDWOODS IN LUMBER AND LOGS
AMSTERDAM, HOLLAND

Oak Bridge Plank cut to order
for QUICK SHIPMENT
WRITE FOR PRICES
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MAHOGANY VENEERS
EBONY DOMESTIC HARDWOODS
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LET us talk to you about the plain and quartered oak that made Indiana famous. It's the kind we make to-day.

Wood-Mosaic Co., New Albany, Ind.

WISTAR, UNDERHILL & NIXON
REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.
QUARTERED WHITE OAK
NICE FLAKY STUFF

R. E. Wood Lumber Company

¶ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.
¶ We own our own stumpage and operate our own mills.
¶ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES: CONTINENTAL BUILDING.

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4/4 to 12/4, All Grades
We also manufacture Oak and Gum

If you appreciate quality and service, we will hold your business

Faust Bros. Lumber Co.

SALES OFFICE: CHICAGO, ILL.
MAIN OFFICE: PADUCAH, KY.

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4 cars Poplar Box Boards, 10" to 12" wide.
2 cars 4/4" Sap Poplar, 6" and up wide.
12,000' 3/8" Sap Poplar, 6" and up wide.
11,500' 1/2" Sap Poplar, 6" and up wide.
5 cars 4/4" Panel & No. 1 Poplar, 18/23" wide.
5 cars 4/4" 1s and 2s Poplar, 7/17" wide.
5 cars 4/4" Sap Poplar, 6/12" wide.
2 cars 6/4" Sap Poplar, 6/12" wide.
1 car 8/4" Sap Poplar, 6/12" wide.

RUSSE & BURGESS, Inc.
Memphis, Tennessee

E. F. PERRY, Manager
LOUIS H. PARKER, Asst. Manager
ESTABLISHED 1892

Lumber Underwriters

Every Kind and Form of

FIRE INSURANCE

FOR LUMBERMEN

66 Broadway New York

OAK FLOORING

Kiln-Dried
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HARDWOOD LUMBER
OAK FLOORING
BOX SHOOKS
CARRIER LUMBER & MFG. CO.
SARDIS MISS.
BENT WOODWORK
ROTARY CUT VENEER

Hollow Backed and Bundled

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In conformity with the rules of the postoffice department, subscriptions are payable in advance, and in default of written orders to the contrary, are continued at our option.

Instructions for renewal, discontinuance, or change of address, should be sent one week before the date they are to go into effect. Both old and new addresses must be given.

Both display and classified advertising rates furnished upon application. Advertising copy must be received five days in advance of publication dates.

Entered as second-class matter May 26, 1902, at the postoffice at Chicago, Ill., under act of March 3, 1879.

ICHABOD T. WILLIAMS & SONS

Foreign and Domestic Woods In Logs, Lumber and Veneers

11th Ave. and 25th Street
NEW YORK

910 So. Michigan Avenue
CHICAGO



Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-Working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

Henry H. Gibson, Editor and Manager
Edwin W. Meeker, Hu Maxwell } Associate Editors

Entire Seventh Floor Ellsworth Building
537 So. Dearborn Street, CHICAGO
Telephones: Harrison 8086-8087-8088

Vol. XXXVI CHICAGO, MAY 25, 1913 No. 3

LIBR NEW BOTAN GARI

Review and Outlook

General Market Conditions

A SLIGHT BUT UNMISTAKABLE EASING of demand has marked the course of trade during the last week or so, not that buyers are showing fear of business conditions, but as a general thing they are exhibiting a considerable degree of caution. Without doubt local influences have had a bearing on this condition to a degree, but it is unquestionably true that this sentiment has been the result of the advice of bankers and other business men with their fingers on the pulse of business which has cautioned the business world against proceeding at a too rapid pace. Indication of this is seen in the almost universal tendency to observe a strict policy as to credits. Very few chances are taken on questionable trade, most sellers of forest products being better satisfied to lose a sale and feel safe rather than to market a block of stock to a customer of whom they are not absolutely certain. A peculiar financial situation has placed numerous concerns of unquestioned stability in situations which are embarrassing to say the least.

It is nowhere conceded that there is any indication of a panicky state and, in fact, a rather remarkable feature of the situation is the absolutely unbreaking conformity to the price levels for hardwoods, which have prevailed for several weeks. In fact, there is still noted a tendency in some items toward a further upward trend and there is reasonable assurance that there will be no falling off in values.

Northern hardwood stocks are coming in in good quantities, but owing to the great rush to fill orders, considerable quantities of it are being shipped in a none too dry condition, resulting in immediate kiln-drying. Extremely favorable weather conditions in the South have enabled southern manufacturers to make considerable headway in lessening the gap between supply and demand. Some lumber is accumulating at mill points, although very little of it is unsold.

The export trade is in about the same condition it has been of late weeks, with the exception that there is perhaps a slightly increased tendency to shipments on consignment.

On the whole, the building situation is very favorable throughout the country, although local conditions in some centers involving strikes, etc., have somewhat retarded the progress of structural work.

The factory trades in nearly all lines are seemingly active, although their actual buying is more or less retarded by the desire to wait for more favorable prices. Car shops are doing a steady business, but are not rushed. The implement trade is one of the best features of the whole consuming element.

Changes in Hardwood Grades

IT IS AN OPEN SECRET that a considerable element of the members of the National Hardwood Lumber Association has a proposition before the grading rules committee of that organization for a change in the rules on many varieties of lumber, which will come before that body at its annual meeting to be held June 5 and 6.

There is another quite important element of the association which is out with a protest against these proposed changes in grading rules. The outcome of the matter is conjectural.

Past and Present

THE COVER PICTURE on the current number of HARDWOOD RECORD is from a photograph taken by the editor about ten years ago. It may not be familiar to most readers at first sight, but the name will call up recollections and perhaps quicken the imagination. It represents a characteristic pose of "Devil Anse" Hatfield, whose name was prominent some years ago in the famous Hatfield-McCoy feud which was staged in the southwest corner of West Virginia, and the adjacent region of Kentucky, which are here separated by Tug fork of Big Sandy river.

The original feud as related by Mr. Hatfield started over "an argument over a passel of hogs." Both clans were of large numbers and the killings that ensued over this trivial cause, a decade or more ago, were numerous. For a long time there has been no outbreak between the McCoys and Hatfields, and Anson Hatfield declares he is through with all feuds so long as he lives.

Mr. Hatfield lives in an humble cabin "at the head of the creek," fifteen miles from Devon, W. Va., on the line of the Norfolk and Western railroad, and nowadays indulges in hunting, fishing and agricultural pursuits. Although well along in years, Mr. Hatfield, in spite of a slight tinge of gray in hair and beard, can pass for a man of forty-five years. He is highly regarded by his neighbors in the entire West Virginia district; is of a kindly disposition, and is a welcome guest throughout the entire region.

Strange to say, the sobriquet by which he is known was not acquired in feudist enterprises, but was the name he gained by his intrepidity while a boy in the service of the Confederate army.

The Hatfields were pioneers in the Tug river region of West Virginia, and they have seen the country develop from its wild and almost barbarous state to one of civilization. "Devil Anse" has lived to see his sons and nephews grow to manhood and become substantial citizens, and today one of his nephews is governor of West Virginia.

In the days of the feud the small river which separates the states

MAY 27 1913

was totally insufficient to keep the factions apart when wrongs, real or imaginary, incited them to appeal to their Winchester rifles for redress or revenge.

That is all a matter of history now, and the unpleasant incidents are closed; for it is plainly the wish of all concerned that the truce will never be broken again. Economic conditions are changing rapidly in that region. Until a few years ago it was a border land, where customs had known little change in a century. The people were strong in their likes and dislikes, and the faults and good qualities of the parents were handed down to the children and to the children's children. Few ideas filtered in from the outside world, and the people took little interest in what happened elsewhere. They were satisfied with what they had, and felt fully able to take care of themselves.

The state of society was not much different from that in Scotland and in many other regions of Europe hundreds of years ago when the people were divided into clans, with comparatively little intercourse between the different clans. Peace under such conditions was broken under very slight provocation, and hostilities were bitter and of long standing. Clannish instincts bound families together, and too often the clan moved as one man, particularly in avenging an affront.

Those people were slow to make friends with a stranger, but when their confidence had been won it could be depended upon. They had faults, but they had good qualities which were admired by all who became intimately acquainted with the people in their homes. They came from the very best stock in the world—the same that fought at Bunker Hill, annihilated Ferguson's army at King's Mountain, cut to pieces the British regulars at the Cowpens, routed Cornstalk's Indian hordes at Point Pleasant, and passed through the horrors of Valley Forge.

The interesting point of view is that those clansmen among the hills of the Kentucky-West Virginia border have changed little since the Revolutionary war. Great transformations in customs and ideas have occurred elsewhere; but the mountain fastnesses shut changes out of the Big Sandy region where the Hatfields and the McCoys lived; and there might be seen exactly the type of people who recruited the armies of Morgan and Greene in the darkest hours of the struggle for liberty. Defeat could not crush them. As often as two or three of them could get together, they would rally and renew the fight. At times their vengeance was terrible, as when they hanged British officers for whipping a boy, but they believed they were obeying the Scriptural law, "an eye for an eye and a tooth for a tooth."

Old customs and ideas are now passing away in the feud district. Railroads have penetrated the region, and sawmills, coal mines, coke ovens, and other industries have broken down the barriers between those people and the outside world; but a few examples of former times remain, and one of them appears in the accompanying illustration.

Discrediting a Great Wood

SOMEWHERE, SOMEHOW, SOMEBODY got the habit of calling the printed imitation of quartered oak "American oak" and "American quartered oak." This habit has spread until it has become a more or less general one with retail furniture dealers handling the cheaper lines, and the result is that today it is having the effect of discrediting one of our greatest woods, the real American oak.

Oak has been so well known as a great wood and has been so highly respected for ages that the name oak itself requires no defense, no special lauding as it is known the world over. But that the American species of it is being discredited by the above type of advertising on the part of the furniture dealers is a matter of concern to every one interested in oak and oak products.

Some time ago with this subject in mind a representative of HARDWOOD RECORD made protest to a furniture manufacturer, telling him that it looked like a shame almost bordering on crime for any one to make a printed imitation of quartered oak and then pass it off as American oak, for to the ignorant it might give the impression that no true oak grows in America and the Yankees simply make printed imitations of it as some of them once made wooden nutmegs.

"My dear sir," the furniture man replied, "life is too short to spend wrangling over points of that kind." He went on to explain that somebody started the habit of calling maple and gum printed in imitation of quartered oak "American oak," and it has now become such a habit that it is rather useless and a waste of breath to try to break it up.

Whether or not this is the attitude of the majority of furniture manufacturers is not known, but it should not be the attitude of anyone interested in the welfare of the real American oak. It is too good a wood and has served too great a purpose to be discredited in this way.

There are other good woods and the people working them have a right to use them naturally and feature them under their own name. Also they have a right to print them in imitation of some other wood, but in so doing they should not seek to curry favor for their own product by discrediting the original wood. This thing of calling printed imitations American oak is a bad habit that ought never to have been started, and somehow by some means it ought to be stopped.

A Start in the Right Direction

THOSE MOST ACTIVELY SPONSORING THE PROJECT to establish a national exhibit of forest products may find some satisfaction in the fact that such an exhibit, on a rather restricted scale it is true, has just been made at Philadelphia. The Pennsylvania Forestry Association was responsible for the display which took place at Horticultural Hall, Philadelphia, May 20-24. This association has always sponsored the work of creating interest in and providing information regarding logging, lumbering and forestry methods in this country.

The exhibit did not conform exactly to the ideas of those advocating a national exhibition, but it did embody some features suggested—namely, there were shown certain features of logging and sawmilling. In addition, there were numerous exhibits of various woods of the country and of work done in forestry.

The main point, however, was that the exhibit was decidedly a success, which should augur well for a more elaborate display covering an actual miniature demonstration of the many phases of logging and lumbering which could not fail to be of intense interest to the average citizen. The original sponsors of the idea should be able to derive some encouragement from this fact.

Lumber Output

THE GOVERNMENT REPORT of the production of lumber in the United States for 1911 has been published. It is similar to reports which have been issued annually for several years and are regarded as the most authentic statements to be had on the subject. The figures for 1911 would have been fresher if they could have been made public a year ago; but though somewhat delayed, they are valuable and show several interesting things relating to the lumber business. One is that no fewer than 20,000 sawmills cut less than a thousand feet each per week, averaged for the year. Though the presence of these small mills was recognized their output was ignored and the lumber which they produced does not appear in the published report. The omission was intentional, to save time and expense, and little was lost by it, because the totals were very little affected. The statistics were collected wholly by correspondence.

On the face of the returns there was a decline of 3,000,000,000 feet, compared with the output of 1910, and the apparent falling off occurred with nearly all of the woods. It is probable that if full returns had been received, there would have been no decline in the totals, and not much change in the individual species. No wood formerly important in the production of lumber has disappeared from the returns, thus showing that no source of supply has been exhausted. It appears, further, that new woods, com-

monly classed as minor species, are coming into use. The output of such is not large, but a tendency to closer utilization of the forest resources of the country is indicated.

A general advance in values is apparent. That fact is clearly brought out in a table reproduced in this issue of HARDWOOD RECORD but no figures are put forward to show whether this advance is sufficient to cover the increased cost of stumpage and the higher wages now paid. It, therefore, remains uncertain whether the sawmill operator is deriving any advantage from the slow and general advance in lumber values, which average thirty-five per cent higher than they were twelve years ago.

It is stated that over half of the country's production of lumber goes into building and rough construction, one-tenth into boxes, one-twelfth into car construction, and rather more than a fourth into other uses. Exports were larger and imports smaller in 1911 than in 1910. Estimates show that the country's forests contain enough timber of all kinds to last about sixty years, at the present rate of cutting and not counting on new growth.

The report is largely statistical and makes a bulletin of forty-five pages. It is published by the Department of Commerce at Washington, D. C.

New Orleans Desires Federal Levee Control

THE UNUSUAL SENTIMENT wherever there has been any manifest interest in the inexcusable conditions leading to a semi-annual recurrence of floods in the Mississippi basin has been that the situation can best be controlled by the Federal government. The plan has been advocated on numerous occasions that the government should take over supervision of the entire work of constructing and maintaining suitable reservoirs and levees to check the flood waters as much as possible in the upper river and its tributaries and to confine the Mississippi to its banks in its lower courses. The trouble has been that no concerted action has been taken with this end in view. Hence it is gratifying to note the spirit of a mass meeting held at New Orleans with the idea of creating public sentiment in favor of the passage of the Newlands River Regulation bill at Washington, D. C. R. H. Downman, a prominent cypress manufacturer of New Orleans, as chairman of the general committee in charge of the movement for federal control establishes a direct connection between it and the lumber business.

According to reports, the meeting was rather remarkable because of the personnel and determined spirit of those present. The specific purpose was the passage of a resolution to the effect that the Newlands bill be passed, which purpose was successfully carried out.

While this meeting was highly satisfactory in its character, it is necessarily but a forerunner of what must follow if the national legislature is to feel sufficient pressure to force it to adopt a bill placing in charge of Uncle Sam the proper regulation of the Father of Waters. It is planned to carry the campaign to the valleys of the Mississippi, Ohio and Missouri rivers and it is earnestly hoped that the same enthusiastic reception will be given to the work in those sections of the country as was accorded it at the meeting at New Orleans.

An Opportunity

IT HAS BEEN MAINTAINED in these columns on numerous occasions that the lumber interests have overlooked and still are overlooking numerous opportunities for gaining favorable hearings before the public in the never-ending controversy between the products of the forest and the substitutes which are doing so much to supplant them. Another suggestion along these lines seems opportune and has to do with a medium which apparently would be of much more value than previous media used for the purpose of establishing the truth regarding products of the forests of this country in the minds of the general public.

The American Newspaper Publishers' Association of New York City is an association of newspaper interests established with the avowed purpose of preventing certain abuses in newspaper publication and of ridding newspapers of the misuse of their reading columns. It would appear that it would be an exceedingly simple matter to get truthful facts about the lumber business in its various ramifications in the hands of this organization, which is essentially a central point for distribution of information of the right kind. If it is sincere in its expression of intent—and it surely must be—such a course could not but be of vast value to producers and wholesalers of the various products of the forests of America.

Forest Service Resumes Publication of Price Lists

THE UNITED STATES FOREST SERVICE has decided to resume the compilation of lumber prices. This work was discontinued some months ago because it was thought that the records maintained by the lumber associations were sufficient. The necessity for some official record of current lumber prices being maintained by some department of the government has been apparent. Use of the price records kept by the Forest Service has been made in law suits and in hearings before the Interstate Commerce Commission. Such an official record has a value in many directions. J. E. Rhodes, secretary of the National Lumber Manufacturers' Association, has just published a letter received from Franklin H. Smith, statistician of forest products of the Forest Service, whose office is in the Federal building, Chicago. The letter says:

> Instructions have been issued by the forester, Mr. Graves, covering the compilation of lumber prices and approaching closely the plan originally instituted in 1908, which was carried out up until a recent date. I am sure you will be interested in knowing that this record will again be made available, since the matter was discussed by you with the forester following the discontinuance of the work on the part of the service.
>
> Briefly, the plan to be followed is to have a comparatively small number of representative mills in each of the principal producing regions report prices at which actual sales have been made on selected grades, which, though limited in number, will show the range of the entire list. These reports are to be compiled for each quarter of the calendar year, with such comments as are necessary to explain fluctuations in prices.
>
> Much of the detail of this work will devolve upon the Chicago office of the Forest Service, and I hope it may be possible for you to extend the fullest official co-operation. At an early date I will lay before you the detailed plans of the work.

Mr. Smith has authority to work out the method by which these records will be obtained. It is proposed to record the f. o. b. mill prices only and not delivered prices of various species at jobbing centers. Mr. Smith seeks the co-operation of the lumber manufacturers necessary to make this work complete and valuable.

The resumption of this work by the Forest Service not only means much of direct benefit to the lumber trade but, of still greater importance, it indicates a continuance of the policy of co-operation between the government and the lumber industry, which will make the work of each more effective and without which both factors will be material losers.

Chestnut in Door Work

WE ARE LED TO THINK, in this day of rapid transit and continual intermingling and intercommunicating, that provincialism is largely a thing of the past and every part of the country knows in every detail all the time what every other part of the country is doing. Moreover we intermingle our wood products in what seems like a pretty thorough manner, shipping birch into the South and oak from the South into the North, redwood and California pine into the East, and hardwoods to the West, but just the same there is more or less provincialism both in the manufacture and use of doors. There is quite a section of the East, for example, in which the solid chestnut is an important item, while in other sections of the country a chestnut door would be something of an oddity. In other words, there are doors such as birch and oak in the hardwood line that are familiar the country over, and even the chestnut door may be met with now and then in every section of the country; but there is an eastern territory in which the chestnut door is about as familiar an article as the birch door in the North and the yellow pine door in the South. This territory takes

in part of Pennsylvania and part of New York and Virginia, and practically covers the section in which chestnut has long been an important wood in furniture and other cabinet work.

In former years good chestnut was more plentiful than it is now and consequently not so high in price. It was easy to get higher grade material for door making and as a result the chestnut was among the first of the hardwood doors to become popular. The solid chestnut door is still holding a favorite place in quite a section, but it is no longer so easy as it once was to get high-grade material at low cost for making it. The result is that in the making of solid chestnut doors today it is quite a practice to buy sound wormy wood, using the best cutting from it to make solid doors, and the balance—that which has too many worm holes for face work—for cores in the making of veneered doors. Chestnut is one of the admittedly best core woods going, and the worm holes in it help rather than hinder its usefulness in this work. Therefore sound wormy chestnut is a very desirable product for making up the core bodies of veneered doors. The veneered door is a familiar article everywhere and is used to quite an extent in every community in the country; consequently the combination works out well for the door business and makes chestnut quite an important item to the makers of doors in certain sections of the country.

Wood Stands the Test

THE SEVENTH ANNUAL NUMBER of the Journal of the British Fire Prevention Committee contains summaries of reports issued at different times on fifty-eight fire tests carried out on various types of shutters and doors. The particulars given relate to the trade description of the door, the name of the firm who had submitted it, the material and method of construction, its size, and the temperatures withstood for certain periods, with a summary of the observations made during the tests. Doors were required to withstand intense heat for periods of from two to four hours. Of course, when heat is very great, and continues during long periods, no known substance is absolutely proof against it; but four doors withstood the heat sufficiently to be classed as "temporary protection." One was a solid steel door, two were of heavy planks covered with metal sheets, and one was a composite door made of oak and asbestos. Thirty-one doors in all were tried, and of the four which stood the tests, three were largely of wood.

Practical Uses for the Motion Picture

THE MOTION PICTURE'S FIELD of usefulness grows. It was once considered merely from the standpoint of amusement and entertainment, but in recent years its scope has broadened and it has now become an effective educational factor. It deals with matters which are in no way sensational, and takes up the serious affairs of life. This is seen in several new departures of the film industry.

One of the first departures of this kind was that undertaken more than two years ago by HARDWOOD RECORD to illustrate logging operations among the mountains in the extreme western part of Virginia on the headwaters of Big Sandy river. The whole operation was shown, from the felling, cross-cutting and peeling of logs in the woods to the final delivery at the mill, including hauling, skidding, splash-damming, rafting, and every other important phase of the operation. That film has been exhibited thousands of times before large business associations, and in ordinary moving picture theaters, and the demand for it continues with no abatement of interest. As a means of education, it has reached thousands of people who never had an opportunity of seeing real lumber operations in the woods.

Similar ideas are now carried out in various directions. Trades are illustrated; the technical and practical workings of machines and factory operations are shown, with the requirements of various occupations. Photographs of all operations are so arranged that the audience is privileged to witness the actual workings of a factory. This is instruction which could scarcely be had in any other way, because few persons have an opportunity to see the inside of a factory during the busy hours when all the processes of manufacture in a particular line are under way.

It is not claimed, of course, that a series of motion pictures affords the actual experience which is essential in learning a trade, and it is not so intended; but it is a help, and it affords a fair insight into ways and methods of work. Some of the manufacturers of motion picture films are specializing along that line. Entertainment and instruction go together, with encouraging success. The method promotes industrial advancement in a way that reaches people who appreciate it, broadens education, and lessens economic waste.

Banker Inspires Confidence

IT IS A PRETTY GENERALLY ACCEPTED FACT that half the financial and business trouble in the world's markets is the result of fancied unfavorable conditions rather than of actual economic weakness. An instance of this is seen in the present easing off of trade in almost all lines. There is in no case any indication of a panicky state of mind, but nevertheless there is a disposition on the part of business men to move cautiously. When it is a known fact that crops give excellent promise, it is easily seen that the sentiment is entirely inspired by imagination.

The sensitiveness of the markets responds, however, just as readily to favorable advice by the big men of business as it does to the reverse. Therefore it is particularly pleasing to have such a prominent man in the business world as Jacob Schiff, of New York, make the statement that, immediately upon the conclusion of tariff negotiations at Washington, we can look for the return of entirely favorable conditions. Mr. Schiff has been in Europe for some little time, making a close study of conditions in those markets, and finds that the situation presents a very favorable aspect. Mr. Schiff's version of the money situation in Europe is that it shows every evidence of a disposition to resume its former satisfactory condition. This favorable comment coming from one so widely recognized as an authority should allay all fears that the present rather unfavorable situation can develop into anything like a condition of panic.

Widely Quoted

IT IS A MATTER of no little congratulation to the editors to find that HARDWOOD RECORD is the most widely quoted lumber trade paper in the United States. Such publications as the Literary Digest and the Outlook find frequent occasion to make liberal extracts from this paper, and magazines like American Forestry and Steam Machinery cite to its readers numerous articles of permanent value.

The publication is getting a great many compliments right along over its comparative innovation in cover pictures. This is reflected in the large number of new subscriptions the publication is receiving, which indicates added appreciation of the efforts that are being made to produce a hardwood magazine that shall have an essential educational value to everyone engaged in the production, distribution or consumption of woods.

Car Surplus and Shortage

THE AMERICAN RAILWAY ASSOCIATION compiles a vast amount of information of varying character having a direct bearing on the various features of railroad work. Its figures on the total surpluses and shortages of cars for various periods during the year, which are issued every couple of weeks, offer particularly valuable information for shippers and also give an interesting indication of the trend of shipping.

The total surplus on May 15 was 61,259 cars, as against surplus of 53,977 cars on May 1. On May 23, 1912, the surplus was 123,683 cars.

The total shortage on May 15 was 10,975 cars, as against the shortage on May 1 of 14,178 cars. On May 23, 1912, the shortage was 7,482 cars. These figures would indicate a slight falling off in shipments during the early part of May.

Somebody gets pretty good money for that twenty thousand dollars' worth of hickory logs that go abroad each month, but surely there would be a good chance to get more of it if the logs were worked up here and the finished product sent to foreign markets.

Pert, Pertinent and Impertinent

The Anglo-Militant

"O, woman, in our hours of ease,
Uncertain, coy and hard to please,
When pain and anguish wring the brow,
A ministering angel thou."
Thus sung the bard of Abbotsford;
Had he beheld thee now—(O Lord!)
He would have changed his tune, I wot.
An angel *thou? well*, rather not!
To see thee stalking up the Strand,
A brickbat in that lily hand—
To hear thy hardened voice that erst
In softer tone our pain dispersed—
With mannish frock and frowning brow—
"Non angeli sed Angli" thou!
We have reversed the pun, you see,
Made famous by St. Gregory.

O, to behold those spirits rare
We entertained once—unaware!

O. C., in Life.

On the Wagon

It's a long and lonesome ride
On the wagon;
And monotonous beside,
On the wagon.
But you don't see cows with wings
Or a green giraffe that sings
Or a rattlesnake that stings
Or a pink bobcat that springs
Or a grizzly bear that clings
Or a thousand other things,
On the wagon.

A Failure

"How can I induce a suffragette to believe that she doesn't want to vote?"

"Marry her."

"I've been married to her ten years."

"Then divorce her and give some one else a chance."

Business Head

"Open the window, waiter; I am roasting," a customer exclaimed who had just dined at a Paris restaurant.

"Shut it up, waiter, I am frozen," protested a man who had just sat down.

The waiter hesitated. The proprietor settled the dispute at once.

"Obey the customer who has not yet dined," he said.—*London Daily Mail.*

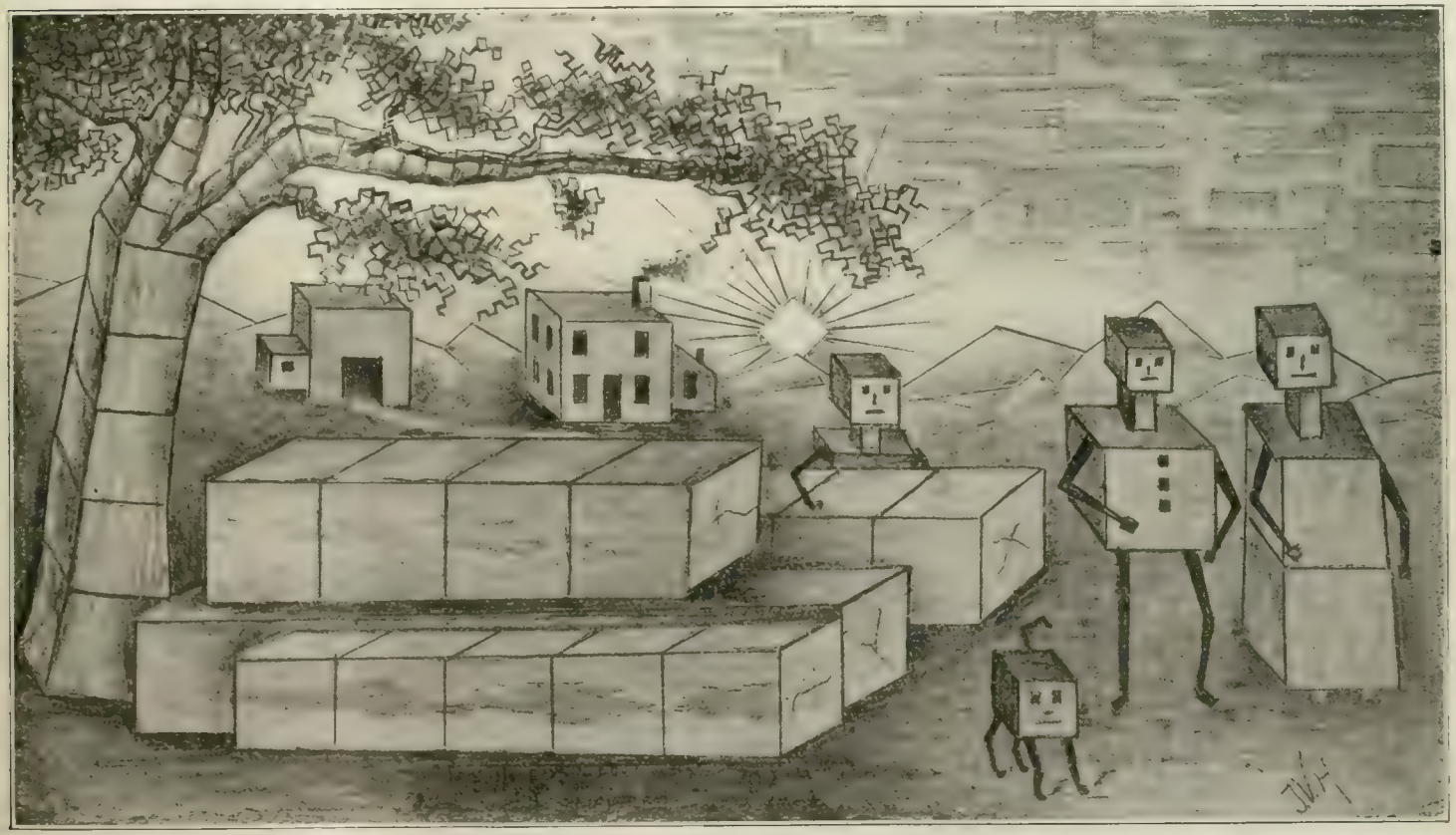
A Timely Hint

Hens that will not lay may be put in cages and taught to sing like canaries, although a song is less appreciated than an egg at breakfast time.

Darkness

A blockhead bit by fleas put out the light,
And, chuckling, cried: "Now you can't see to bite!"

THE LUMBERMAN CUBIST



As depicted in drawing and verse by J. V. Hamilton

'Tis told, a lumberman, there was,
Who cut, so long, square woods with saws,

And strove to make, with all his might,
Boards, beams and blocks, with angles right,

Till he became cubistic mad,
So seized by this strange cubist fad,

That houses, people, children, dogs,
The trees, their limbs, their trunks and logs,

Their leaves, and e'en the clouds on high,
Showed corners in the very sky.

The distant hills, the rising sun,
In style, he has uniquely done.

The line of beauty doth depart
From this, the cubist's view of art.

All things he sees, no matter where,
Are shaped in forms of cube or square.

And graceful curves of brush or pen,
Have gone, we hope, to come again.

Profitable Lumber Advertising

POINTS ABOUT WRITING COPY

Editor's Note

This is the fourth of a series of articles on how to write lumber advertisements, the first being a general article on the subject, the second on "Writing Copy," and the third on "Points about Writing Copy." The fifth on the subject, "Media, or Papers to Select," will appear in the next issue.

Right here you'll begin to wonder how much copy you can get in a certain space. This is not very technical and a little explanation will teach you how to do it.

All types are based on what is known as the "point" system. There are 72 points to the inch—points refer to the height of the body of the type and not the width. The face of the letter itself on the body of the type doesn't go by any measurement whatsoever—although each letter belongs to a certain series, such as old style Roman, etc. The point is simply 1/72 of an inch. Eight-point type is generally used in all body or reading matter.

Now for illustration, we will say you have an eighth-page space in the advertising section of the HARDWOOD RECORD. Take your rule and measure the width and length of the space—you find it measures 3⅝" x2¼". Reducing this to square inches, you get 8⅛ square inches. Keep this in mind. There are many tables issued by which you can find the approximate number of words to the square inch, but one of the best, if not *the* best, is the one published on the reverse side of the I. C. S. type gauge. It gives the sizes used principally. We will consider only ordinary sizes.



OF THE SIX ARRANGEMENTS SHOWN ABOVE, FIGS. 3, 4 AND 5 ARE PREFERABLE FOR A SMALL CARD AS THE BORDERS ARE IN BETTER BALANCE WITH THE REST OF THE ADS.

WORDS TO THE SQUARE INCH

6 point, set solid	47	10 point, set solid	21
6 point, 2 pt. leads	34	10 point, 2 pt. leads	16
8 point, solid	32	12 point, set solid	14
8 point, 2 pt. leads	23	12 point, 2 pt. leads	11

(Two-point leads mean that a piece of lead, 2 points in thickness, is inserted between each line of type, thus making the reading more legible and so that it will stand out.)

Going back to the illustration—the space is small and we'll suppose that there is no allowance made for the border, heading, or signature. In this size of space (⅛ page) 8-pt. body type will be all right. You have 8⅛ square inches and by referring to the table you will find that 8-pt. type set solid (without leads between the lines) requires 32 words to the square inch. Then 8⅛ squares inches × 32 words to the square inch = 205 words for our eighth-page space. There you have the simplest way of figuring the number of words. Simple, isn't it? Due allowance must be made, however, for a lot of long words—you can't get as many in the space in that case. The reverse applies for a lot of short words of one syllable. A little practice will teach you very readily.

The subject of type faces is too deep a study to go into in detail. The writer would suggest that you get from your printer what is termed a "type book." Your regular printer will get you this free. A good type book will give you many ideas in arranging your advertisements and specifying the types. And if you would be original and different from the ordinary lumber advertiser, it would be to your advantage to get a type book and specify some particular style of type different from the other ads on the page on which your advertisement is to appear. This means that your advertisements will look different, and that is a good point in commanding attention. Just keep in mind that you want your advertisement to stand out from the others on the page so that the buyers won't miss it. The writer is speaking more now of display or heading types, as well as borders, sub-headings and signatures; for in these several parts of display are the means of attracting favorable attention. Body types should always be of the most legible kind—the very easiest to read. A very radical example of illegible type is old English. An example of the most legible type is old style Roman. Ronaldson old style is another good one. Both are most legible and do not tire the eye.

Another good point in having a type book: Your space is 3⅝" wide, we'll say—that is, an eighth page in HARDWOOD RECORD.

You have for your heading of the advertisement, "Dry Plain Oak—Immediate Shipment." Count the number of letters, counting also one extra for each space between the words. You will find you have 32 letters. By taking your type book you can then pick out the style of type you want to use. Now take your rule and mark the 3⅝" on it. Then lay it over the several sizes of that particular style of type until you find the size that will permit of 32 letters in the width of space (3⅝"). By the way, never use all capitals in small headings or small advertisements because they are not as legible as "caps. & l. c." (capitals and lower-case letters). And remember also that all capitals take up more width than "caps. and l. c." In the case above we find that 14-point Cheltenham Bold will do nicely for the space and leave some little room on each side of the heading so as not to crowd it. Or we can use 24-point Cheltenham Bold Condensed. In the latter the face of the type is condensed into a smaller width, although the height is just the same as type of the ordinary width.

Use the same principles in laying-out the sub-headings or signature for a given space.

Where there is quite an amount of copy in a fair-sized space, it is usually a good idea to break it up with sub-heads to relieve the monotony and the strain on the eye. This, however, applies generally in the case of solid description.

The use of borders: Borders are nearly always of the "rule" type. There are, of course, other styles, such as the hand-drawn ones and which, needless to say, must be drawn by an artist and then photographed. This is an expensive process, and as this series of articles will deal with advertising in the simplest form, the expensive processes will be left out. Border rules are also on the "point" system. When we speak of a 6-point border, we mean a rule 6 points in width—not length. Take HARDWOOD RECORD and look through the front advertising sections—nearly all the advertisements are enclosed in the same square borders (or borders nearly all the same). Each advertisement is almost identical with its neighbor. It is possible by just changing the border of your advertisement to make it stand out from the rest of the page. To illustrate this, the writer has taken one advertisement, shown it in its original form and then shows the same advertisement with different and distinctive borders taken from a standard type book. This will show you how an advertisement may be made to stand out from the rest on the page. There is one great danger that the beginner of advertising should look out for, and that is, do not make the border so heavy that it fore-shadows the copy. Figure 2 shows a 12-point border and which is really too heavy for such a small advertisement. It has put in, however, to bring out this point. Some borders and headings are so heavy that they seem to make the body-matter dim and hard to read. It has the same effect on you that a salesman who comes into your office with such giddy attire that your attention is entirely focused on his clothes and you don't catch much of what he says because your attention is directed elsewhere. It is all very well to catch the eye, but don't give the reader too much "punch" in the matter of heavy display.

When you want to emphasize a word you put it in bold-face type or in italics. "Bold-face" means the same size of type only that the width of the strokes of the letters themselves are heavier. Italics needs no explanation.

At this point the question of illustration presents itself. The ordinary lumber advertiser thinks he has gone a long way in advertising when he has placed a picture of his mill, his log-skidder or a view of his yard, in his advertising space. As a matter of fact these pictures count for nothing except in the reminding style of advertising, which is simply another form of the present-day "standing-card" style. Reminding type of advertising is a dead issue as far as the lumber business goes. It still works or plays its part in the campaigns in lines of goods. In lumber you want to tell in detail about some point of your goods. Take a picture to show this point. Remember, illustration reinforces the copy. So be sure that the illustration bears directly on the copy, otherwise it does not serve its purpose. For instance, you are end-drying maple and your advertisement tells all about your process. Suppose you put an illustration of the men cutting logs back in the woods. Does that reinforce the copy? Well, hardly. But in this case it would be well to place a picture of the end-racks and show the maple drying. Then you can call attention to specific points in the picture. Get the point? Always have the picture you take the largest you can get, for when you send it to go into a small space it must be reduced in size. The larger the original picture the better it will show up in the small half-tone, because the detail will be much better. When planning to use illustration, measure the space within the advertisement that you are going to allot to the picture and mark it off on the "layout." (We are coming to an explanation of that.) You should bear in mind that when you reduce a picture you reduce it in the same proportion as the original. For instance, if the original is a 3¼"x 5½" picture, a half-reduction would bring it down to 1⅝"x2¾".

So far in this article matters have been quite technical, but it is the only portion of advertising that is.

That brings us to "layouts." A layout is simply a rough sketch of the complete advertisement to give you an idea of how it will look when set up. It also gives the compositor an idea of what you want as to border, styles and sizes of type, etc. Therefore, a layout should always accompany the copy you send to the paper which is to run your advertisement.

In making the layout get the size of the space you are to use in the paper. Lay the exact size off on a plain piece of paper, drawing in the lines lightly with pencil. Next decide on the style and size of the heading. Count the letters as explained before in this article. Then measure the height of one capital and one lower-case letter, marking these widths at the top of the layout where your ad starts. Next put in the signature; then the border. Draw the letters in roughly by hand and approximately the size and width of the type you have decided to use. Then draw a light line away from the letter of the heading and write in the size and style of type you have chosen. This tells the printer or compositor just what to set up. Do the same with your border, signature, etc. With the room you have left, find out how many square inches of space you have for the body matter by the method outlined in the first part of this article. Just draw fairly heavy lines across where the lines of the body matter will come, and about the same "heft" as the type will look when set up. Specify what size and style of type you want for your body matter. Now you have a fairly good idea of what your advertisement will look like when set up and run.

A word about "balance." Some advertisements you see seem to be "lop-sided." This is termed "out of balance" and the principle is the same as the law of balance or equilibrium. Care should be taken not to get too heavy type for the headings and placed to one side; otherwise it will seem to have the tendency to "pull" the whole advertisement over to one side unless an equally heavy piece of type or other matter is used to counter-balance it.

Ireland's Last Forests

Some of the trade journals in the British Isles call attention to the destructive timber cutting now taking place in Ireland. Forests are few there and these few are rapidly disappearing. Whole plantations have been swept away. Those who criticize the methods followed say that when money is needed, the first thought that occurs to the proprietor is to cut and sell his timber. Stands three hundred years old are cut clean in many instances, and the country's wooded area steadily grows smaller.

The largest novelty works plant in Michigan is located at Saginaw. The common method of securing raw material is to buy the output of small mills, paying so much per thousand after sizing up the quality of the logs. Some of the larger mills of the state, especially those at Cadillac, operate novelty works in connection with their plants in order to utilize wood that would otherwise be wasted. The concern makes spools, spindles, toys, wooden clubs, mallets, croquet balls, etc.

A sawmill without timber to cut is as lonesome looking as a mud puddle without a duck, and just about as valuable.

Available Foreign Hardwoods

SOUTH AMERICAN HARDWOODS

Editor's Note

Following is the second of the series of articles on foreign hardwoods available for use in this country. The first article covered hardwoods available in the Central American countries and the next article will cover the various species of merchantable hardwood timber trees of Africa.

It has been estimated that the forests of South America occupy more than 700,000,000 acres, which represent approximately one-half the forest area covered in North America. Nearly one-half of the South American forests may be classed as tropical which are wholly different from our north woods. There are seldom solid stands of single species or even of a few mixed species. Instead, hundreds of kinds of trees grow thoroughly mixed and scattered through the whole forest. In the Amazon valley it is estimated that over 200,000,000 acres are covered with original forests, movement through which, owing to the richness of the growth, is difficult if not impossible. Only the Congo forests compare with the greater part of this prodigious zone of forest in extent and density of timber. This is the largest body of tropical timber in the world and will become of special importance to the lumber interests after a great proportion of the forests in the densely settled parts of the temperate zones are cut away to make room for agricultural operations required to support the rapidly increasing population.



BEECH FORESTS OF CHILI

The Amazon river is navigable for 2,100 miles, and the bulk of the valuable tropical hardwood timber in Brazil, Peru, and Ecuador can thus be reached. The navigable possibilities of the Amazon and its tributary streams are of the greatest value to all the lumber and other commercial interests of the world. All the timber in Colombia, Venezuela, and the Guianas can be reached through the Orinoco, Magdalena, and other minor streams which flow north and east into the Caribean sea. The forests in the latter countries are also largely tropical and have for many years supplied valuable fancy and other hardwood to all the countries of Europe and to the United States. In fact a few species such as the greenheart, mahogany, cedar, and satinwood have become scarce through continued exploitation. Other species are now being cut to supply the demand which is constantly increasing.

Dr. Schlich once remarked that as the timber supply declined in the northern hemisphere, another suitable source of supply must be looked for in the southern hemisphere. The demand for different woods and the growing scarcity of the most useful kinds in this country force us to go to the tropical countries of the southern hemisphere for many millions of feet annually. The South American woods now in general use in this country are much more numerous than is generally supposed even by the large importers and wood users. A number of different kinds are imported into this country from South America under one name as in the case of rosewood, mahogany, cedar, or satinwood.

In asking what the possibilities are for the introduction of woods suitable for furniture, construction, and for general building purposes, we enter into a many-sided inquiry. There is, of course, an enormous disproportion between the total number of woods that will be offered to importers and the number actually suitable as substitutes for our more important native timbers which are becoming scarce. It will be difficult to find a wood in South America that will have the admirable qualities of our yellow poplar and southern yellow pine, but the maple, beech, oak, and birch can be duplicated so far as appearance, working, and lasting qualities are concerned.

Brazil and the countries lying to the north of it have approximately 1,500 distinct timber species. Argentina, Paraguay, and Uraguay are said to have about 900 species, of which about one-half are important. Chili, Bolivia, and Peru have equally as many very useful kinds in the mountain forests, which are as yet practically inaccessible. The transportation difficulties in the mountainous countries are so great that the cities of the west coast depend almost wholly upon imports chiefly from the United States for their lumber, yet their mountain forests are known to be very extensive and valuable. The population of Chili and Argentina is growing so rapidly that a source of supply can hardly be expected from these countries. Brazil and Colombia will perhaps form the chief source of our future timber supply. Transportation facilities are being speedily developed, and capital from the United States is pouring in, thus developing natural resources with amazing rapidity. Europe draws upon the Guianas and Venezuela for large quantities annually. Peru, Ecuador, and Bolivia will not figure in the world's lumber market to any great extent for many years to come. Among the timbers which may be expected to play a more or less important part in the American markets during the next ten years will be the following:

Crapwood, carapa or andiroba (*Carapa guianensis*), is a tree from sixty to one hundred feet in height and from two to three feet in diameter. It is very common in the Guianas and northern Brazil and yields a reddish-brown wood resembling mahogany. It is straight-grained, moderately heavy, hard, strong, and takes a very fine polish. The wood is used for the cheaper and medium grades of furniture, and has been imported for this purpose for a number of years. It reaches the English and American markets under the name of Demerara mahogany and is generally sold for much less than true mahogany brings. A closely related species (*Carapa grandiflora*), commonly known as cumussiu, is a very good wood and possesses nearly similar properties. This tree is found principally in Brazil, and the wood is likely to be introduced into this country for cabinet making.

Vinhatico, or cabui (*Interolobium latescens*), is a large tree often

from eighty to one hundred feet high and from two to four feet through. It produces wood that resembles the conacaste (*Enterolobium cyclocarpum*) of Central America and is used for the same purposes. While it is rather coarse in grain, it is often used in place of our diminishing supply of black walnut. The well-known timbouva (*Enterolobium timbouva*) is one of the most gigantic trees in Brazil, often attaining one hundred and thirty feet in height and nearly ten feet in diameter. The wood is light brown, rather soft and porous, very durable, and remotely resembles true mahogany. It is used for building, interior finish, furniture, and boat construction.

Brazilwood or Brazilletto (*Cæsalpina brasiliensis*) is a tree of average size. Its wood is light red, very hard, heavy, and close-grained. It contains bright red coloring matter which is often extracted for commercial purposes. Its chief use is for violin bows and for small articles of furniture, turnery, and parquetry. The available supply of this wood is almost exhausted and consequently is very high-priced.

Brazil (*Cæsalpina echinata*) is a tree from forty to fifty feet high and from one to two feet in diameter. The wood is well known for its use in making dyes, and is also used for inlaid work and for making small articles of furniture. It is now becoming very rare. Other dye woods are being substituted and the remaining trees are often cut down for use as fence posts and other purposes requiring strength and durability. It is also known as peachwood, Lima, Nicaragua, and Pernambuco wood. In French Guiana it is called Brasil de St. Martha.

Fustic (*Chlorophora tinctoria*) is another dye-producing species. It attains a height of from twenty-five to fifty feet and a diameter of two feet or more. Freshly-cut heartwood is light yellow, but after exposure to air and light becomes a yellow-brown. A cubic foot of seasoned wood weighs about fifty pounds. A good part of this wood used in the United States comes from Venezuela and Colombia.

Angelim, known also as cabbage tree (*Andira inermis*), forms usually a dwarfed tree from thirty to forty feet high, and sometimes six feet in diameter. The wood is reddish-brown, hard, very durable, and takes a very beautiful polish. It is found in the northern and central parts of Brazil. Under the name angelina several other species are recognized by reason of their firm and hard woods, and they are used for building and for naval construction, as well as for furniture, parquetry, and turnery.

Cedro (*Cedrela fissilis*) is a beautiful tree of remarkable size; the trunk is sometimes ten feet or more in diameter. It is found in all the provinces north of the Rio de Janeiro and especially in the valley of the Amazon, where it attains its greatest dimensions. Large, fine planks are obtained from it. The wood, which resembles Spanish cedar, is used also for making cigar boxes, turned articles, images, and furniture. It is becoming so limited that it is used only for boxes for the very best cigars.

Cumaru, known also as tongabean, gaiac, cumara, and tonquin bean (*Dipteryx odorata*), is a tree from thirty to forty feet high and about three feet in diameter. It produces dark brown wood, which has a greenish-yellow coloring matter in the pores. It is very heavy, hard, rough, exceedingly cross-grained, very durable, and employed for purposes requiring strength and stiffness. It is now imported and used for building purposes, fishing rods, and, in the form of veneer, for cabinet work.



A CONIFEROUS FOREST IN THE HIGHLANDS OF CHILI

Jacaranda preto (*Machaerium legale*) is a tree from seventy to eighty feet high and from two to three feet in diameter. The wood is usually of a dark reddish color and is one of the most compact and hardest woods known and is much in demand for building, cabinet work, and turned articles. This name is applied also to (*Dalbergia nigra*), a tree belonging to the same section of leguminous plants. Jacaranda is a general term applied also to the following species: (*Machaerium firmum*), (*M. legale*), and (*M. incorruptible*), which are all large trees. On account of this confusion of names, the wood of these trees is often palmed off on the market for the true rosewood of Central America. One other species of this genus from British Guiana is *M. schombrugkii*, which produces the beautiful mottled wood called locally itaka or tigerwood, used so extensively for furniture. Still another species (*M. brasilicnse*) is sometimes called rosewood. This wood is light red, hard, heavy, and very fine and even-grained, which renders it very desirable for ornamental cabinet work, especially for pianos, turnery, and inlaid work.

Pao d'arco, known also as white cedar, cogwood, and roble blanco (*Tabebuia pentaphylla*) is a tree from sixty to one hundred feet high and from four to six feet in diameter. The wood is yellowish or sometimes very light brown, hard, compact, even-grained, and elastic. It is used for building, naval construction, and cabinet work.

Greenheart (*Nectandra rodiæ*) is a very valuable timber from British Guiana and is remarkable for its lasting qualities. The wood is produced by a tree from sixty to one hundred feet high from two to four feet through. It is very hard, heavy, tough, strong, elastic, and fine-grained. Greenheart is said to be the strongest timber in use and is now being imported into this country for special uses. It is unsurpassed as a construction timber and finds its chief use for marine works. Nansen's ship, The Farm, and the Antarctic ship, Discovery, were built of greenheart, which is said to be proof against marine borers.

Quebracho (*Quebrachia lorentzii*) is one of the few woods that is at present shipped from Argentina and Paraguay into this country. About 80,000 tons of this wood are shipped into the United States for use in extracting tannin. Quebracho is one of the hardest, heaviest and most durable woods known. This wood will continue to be shipped into this country as long as the supply will hold out.

Colombian mahogany (*Cariniana pyriforinis*) comes chiefly from Colombia and has been sold here as a mahogany substitute. The wood is moderately hard, heavy (about forty-two pounds per cubic foot), strong, and tough. In color it compares almost exactly with genuine mahogany.

True mahogany (*Swietenia mahagoni*) is found in northeastern Colombia and together with cedar is exploited and shipped into the United States. Mahogany is nearly exhausted.

In addition to the above named woods nearly all of which have

already been imported into this country, a great many others of lesser importance come to our markets. The satinwoods, lancewoods, zebrawoods, and purplehearts, all of which are produced by no less than six different trees, form a part of our timber trade at the present time, and the number of kinds and quantities will continue to increase from year to year.

Practically no reference has been made to the timber on the Andes, but while the whole chain is densely wooded these forests are at present inaccessible. Peru, Ecuador, Bolivia, and Chili have great forest wealth, but the timber will be needed for home consumption as soon as it can be made available.

L. L. D.



Strength Affected by Moisture



The fact is well known that a piece of paper soaked with water loses strength and becomes soft. If it is dried in a rather high degree of heat it regains much of its former strength and stiffness, and may in some cases become stronger than it was before the soaking. Wood follows the same rule in many respects if not in all. Wood and paper are composed of practically the same material, but the former has more structure; that is, the particles which compose a piece of wood are arranged somewhat differently from those which make a sheet of paper. However, the behavior of the two pieces of material is much the same when they are soaked and dried.

It is impossible to reason out the causes which produce these effects, or to tell why certain effects follow certain causes, in soaking and drying wood. It is a matter to be determined by actual tests. Some traces of laws may be found, which seem to govern the matter, but thus far the only known way of determining what effect moisture or drying will have on wood is to try it, to make tests, and conduct experiments. On this subject, Harry Donald Tiemann in his treatise, "The Strength of Wood as Influenced by Moisture," says: "Since wood is a very complex structure, composed of many substances, concerning the exact chemical and physical nature of which very little is known, it is impossible to theorize with any degree of certainty as to the influence of moisture, heat, and other intrinsic factors. The laws are extremely subtle, and can be determined only empirically from a large number of actual tests."

No fact is better known than that dry wood is stronger than green. The difference is very great with some woods, and spruce is one of the best examples. A dry stick of spruce may be four times as strong as a green piece of the same size. With the majority of woods, however the difference is not so great. It has been estimated that the strength of high-grade carriage stock is increased from 50 to 150 per cent by drying. It is not definitely known why seasoning increases the strength of wood, but a good many interesting things have been found out which may ultimately explain all about it.

Moisture exists in green wood in two conditions. Some is contained in the hollow cells, in the same way that honey occupies honey comb, or that liquid is contained in a bottle. Other water exists in the walls of the cells.

It is the water in the cell walls—not that in the hollow interior of the cells—which influences the strength of wood. If the cell walls are saturated, the wood is weakened; when these walls become dry, the wood is strong. When the cell walls have become saturated they will absorb no more water, though the cell cavities may continue to take it in.

When dry wood is exposed to the air it absorbs moisture to the extent of from eight to sixteen per cent of its dry weight, and in so doing it becomes weaker than it was in its dry condition.

When wood has once been dry and is brought back to the wet condition by soaking, it is weaker than it was in its green state. Wood which has been kiln-dried in moist heat of about 130 degrees F., will lose from fifteen to eighteen per cent of its original green strength, when it is resoaked.

"Experiments," says Tiemann, "indicate that drying wood at high temperatures, either in steam or in dry air, produces the following results: (1) It permanently reduces its moisture content below that of ordinary air-dried wood when again exposed to the air, at the same time rendering it less hydroscopic, so that it is less susceptible to changes in the humidity of the air; (2) the moisture condition of the fiber saturation point is changed, being reduced by high temperatures with dry air or superheated steam; (3) the strength of the wood is increased, except in the resoaked condition. Whether the increase in strength is due to the reduction in hygroscopicity or to physical changes is of secondary importance, since in either case the strength under like atmospheric conditions is increased."

The effect of moisture on the strength of wood presents an interesting example of the acceptance of a fact before its cause is clearly understood. The cause will doubtless be discovered sometime, for numerous investigators are patiently working their way toward it, thus illustrating Tennyson's summary: "Science moves but slowly, slowly creeping on from point to point."

Trade-Marking Lumber

The Kraetzer Company of Chicago, manufacturer of the Kraetzer preparator, has registered in the United States patent office as a trade-mark the term "Kraetzer-cured Lumber," as depicted in the accompanying illustration. It is expected that manufacturers who employ this system of treating lumber to insure its quick and accurate seasoning will rubber stamp or brand their lumber with this trade-mark:

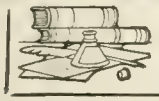
TRADE MARK
Kraetzer-cured
LUMBER
REGISTERED IN U S PATENT OFFICE

This system of lumber treatment is resulting in no inconsiderable popularity of several woods whose refractory qualities did not readily lend themselves to ordinary lumber drying practice, but through this process are very much improved in quality, to say nothing of the fact that they are devoid of stain, warp, twist and other seasoning defects.

Recently a Chicago furniture manufacturer has put some Kraetzer-cured 2½" red and sap gum to a pretty severe test to ascertain if it would stand up under rigorous treatment. He says when the lumber arrived he found it was the prettiest looking stock he ever saw, that the sap was absolutely free from stain, the lumber dry and entirely unchecked. He cut several pieces about 4' long, into rococo shape—something like the letter "S"—soaked them in water over night and laid them on hot steam pipes for two days. Two other pieces that he did not soak were also laid on steam pipes for the same length of time. Under this severe treatment, the lumber showed no blemish whatsoever, either in warp or check.

Recent drying tests on one-inch hard maple steamed in the Kraetzer apparatus show, under normal drying conditions in the open, a reduction in weight of 28½ per cent without seasoning defects, in two weeks' time, and one-inch birch, a reduction in weight of 29½ per cent in the same length of time. This weight is less than normal shipping dry weight after months of air drying without the use of the steaming apparatus.

At the present time The Kraetzer Company is shipping one of these equipments every week, and is still quite a ways behind its orders. The apparatus seems to be in growing favor everywhere, but the larger number of installations at the present time are being made in Arkansas, Louisiana and other southern states.



Developing the Hardwood Habit



The incidental mention in a recent editorial in HARDWOOD RECORD on hardwood becoming more popular in home building that what is needed is a broad campaign of education, touches an idea that is worth more elaboration. This matter of educating the building public and of developing the hardwood habit means a lot more business for the hardwood trade, and it means better houses and that home builders will be better satisfied with their homes.

Not only is there room for extensive boosting of hardwood products in doors, interior trim and floors, and finally extending to much greater use of paneling, but there are many special points about it all that can be taken care of and worked out in this process of education and cultivation.

As pointed out in the editorial referred to, it is the carpenter, contractor, and builder who holds the pivotal position in the building world. He is the man to keep in touch with. Many times a producer of hardwood has found himself depending directly on the whims and habits of the builder. For example, there is the builder who first starts using hardwood flooring. His natural inclination at first is to want to get the hardwood flooring in as long strips as possible. He talks long strips to his customers, and then wrangles over the matter with the hardwood flooring man, kicks about short stock in his flooring supply, and insists on getting more long pieces.

One hardwood flooring man, speaking of this matter, said that he had been annoyed so much by it that he had taken the matter up actively with the builders and had been doing some demonstrating with parquetry and with the short stock paved in with suitable borders to show them how they could get a floor with more distinctive qualities about it out of the shortest stock, a floor really worth more than that made of long strips without it costing them any more to lay it. He has been persistently urging certain of the progressive builders to get the habit of doing this and of featuring it in their offerings. Of course that is selfish in a way, for it means giving him a better opportunity to clean up his raw material and use his short stock, but if it helps the builder at the same time without costing him any more, it has served a good purpose and his selfishness is justified. It is simply a species of the education for which there is room for more in various branches of the hardwood business.

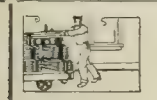
There is another instance of persistent effort along this line, directed toward the architect instead of the contractor, which is bearing fruit. That is the effort to push the hardwood veneered door with a crossbanding of asbestos under the face veneer. The promoters of this idea have been working on it for a number of years and it has been quite an up-hill fight because a door of this kind costs considerably more than a plain door on the one hand, and it has taken a long time to convince the architects and promoters of big buildings that it was practically as fireproof as the metal and composition doors. Persistent effort, however, is winning out and today this veneered door with a fire-proofing sheet of asbestos under the face veneer is not only being accepted by architects for office and other public buildings, but it is carrying with it other woodwork of the same class. Wood panels and trim treated in the same way are now being used in some of the modern fireproof buildings, and a steady and persistent campaign of education is putting wood back in the place it belongs.

Many specific instances of this kind could be cited where enterprising manufacturers of woodwork for houses and buildings have succeeded, by advertising and educational campaigns, in introducing more good hardwood into home building. One of the first and most conspicuous was that of the birch veneered door which has been made known the country over, and is not only extensively used now but has led to the use of many other veneered doors and to hardwood taking a very conspicuous place in the door trade, which was formerly practically controlled by pine.

What has been done in the past is but a sample of what may be done in the future. Some may be going on the false assumption that all the educating of this kind that is necessary has already been done, and that there is not much more room to spread the doctrine of hardwood in home building to the end of materially enlarging the trade. There is really more room now than ever before and more opportunity to obtain direct and immediate results from a campaign of education. So far only a small amount of wood work has been entering the average home as compared to what might be introduced therein. The floor, doors, casing, base, picture moulding, when all made of hardwood, constitute a good start, but it is only a start. There are the stairways and then come wall paneling, overhead beams and paneling, and often the building in of bookcases and other articles formerly classed as furniture but now often included in the home building itself and made a part thereof.

There are many different people to reach and work on in developing this hardwood habit. An important class is that of the carpenters, contractors and builders. There is the architect, and there are the real estate people and speculative builders who build to sell. It is only a matter of convincing them that they can increase the selling value of their houses more than the extra cost involved to include hardwood and they will take it up instantly. And finally there is the great general public to reach and train to a taste for hardwood. Right now, too, all of these seem to be in just the right mood to receive favorably the many arguments which can be offered in behalf of hardwood for interior trim and to develop the hardwood habit.

T. C. J.



Wood-Using Industries of Vermont



Vermont is a small, rugged state, made up of green hills and narrow valleys. Its area is 9,135 square miles, its population 355,956. It is among the smallest in size and lowest in population of all the states. It is not growing much. Its population and wealth are nearly stationary, and the habits and customs of its people are subject to little change. The natural resources are moderate, but dependable. Maple sugar and fine building stone are the best-known commodities sent to market, and no alarm has been sounded that either is in danger of exhaustion. The people appear to know how to take care of what they have and to make the most of it.

The state's timber resources have not been widely advertised, and many persons will learn with surprise that, in proportion to population, Vermont is hardly surpassed by any state in the quantity of its wood manufactures. It might be added, too, that in quality its forest products are of a high order. The thrift and economy of its people are proverbial, and the factories of little Vermont have worked out ways to save waste which other regions might copy with profit.

Vermont in coöperation with the Forest Service has published a report in the form of a pamphlet of 118 pages, giving the status of the wood-using industries of the state. The period covered is one year, ending December 31, 1911, and seventeen principal industries and several in the minor class were investigated. Forty-two woods were reported, all but three of which are native of the United States. The highest priced wood was Circassian walnut, the second was mahogany. No other wood cost an average of $100 or more, though white oak came near it. Its average cost at the factory was $99.24 per thousand feet. The next highest in price was California redwood at $75, and next to it was black walnut at $67.50. The manufacturers in Vermont pay more for the lumber they use than is paid by similar industries in most of the southern states, but less than the

average in some other regions where much wood is used. In Vermont the average cost of all wood delivered at the factories is $19.84 per thousand. The averages in certain other states follow: Texas $11.30, Arkansas $11.49, Louisiana $11.64, Mississippi $12.22, Alabama $12.24, North Carolina $13.83. The cost of the raw material in most of the New England states does not differ much from the cost in Vermont. In New Hampshire it is $19.29, Maine $20.18, Connecticut $25.82. In the great wood-manufacturing states of Illinois and Michigan the cost is $28.76 for the former and $23.12 for the latter.

In proportion to area and population Vermont is a large manufacturer of woods commodities. It is likewise a large producer of raw material. Its forests contain both hardwoods and softwoods in abundance, and the mills cut enough of each kind to supply the state's industries, with some to spare; but much wood is brought into the state to be further manufactured. The total quantity used during the year was 207,262,376 feet. More than one-third of it was red spruce, nearly one-fifth was white pine, while southern yellow pine and hemlock were demanded in considerable quantities.

The most important hardwoods, named in the order of the quantities used, were sugar maple, yellow birch, beech, chestnut, red oak, basswood, paper birch, black ash, aspen, white oak, white ash, yellow poplar, and white or gray elm. One-eighth of all the wood used by manufacturers in the state was sugar or hard maple. It is, therefore, apparent that the Vermont people are not setting apart all their maple for sugar making. Yellow birch is in nearly as great demand as maple.

The amount of wood used by the several industries, the average and the total cost, and the per cent grown in and out of the state are shown in the following table:

SUMMARY BY INDUSTRIES OF ALL WOOD USED IN VERMONT

Industries	Quantity —used annually Feet B. M.	Per cent	Average cost per 1,000 ft.	Total cost f. o. b. factory	Grown in Vermont Per cent
Planing mill products	85,626,750	41.31	$20.34	$1,741,330.07	54.22
Boxes	40,699,060	19.64	17.50	712,175.83	39.15
Miscellaneous	23,702,966	11.44	19.44	460,712.01	60.99
Woodenware	11,399,000	5.50	16.47	187,785.80	65.48
Furniture	8,779,915	4.24	27.28	239,572.79	57.12
Chairs	7,987,126	3.85	18.68	149,235.83	75.61
Sash, doors, blinds and genl. millwork.	7,451,000	3.59	26.17	194,988.05	42.69
Tanks and silos	7,354,000	3.55	20.12	147,974.75	6.98
Shuttles, spools and bobbins	3,065,500	1.48	13.18	40,417.50	97.72
Refrigerators	2,601,774	1.25	19.80	51,517.01	51.84
Car construction	1,980,800	.96	26.11	51,724.50	21.91
Handles	1,527,500	.74	23.45	35,826.00	100.00
Toys	1,495,985	.72	16.64	24,894.63	83.29
Vehicles	1,112,500	.54	20.72	23,053.53	99.15
Laundry appliances	693,000	.33	22.30	15,456.38	100.00
Brushes	641,000	.31	14.58	9,344.00	100.00
Agricultural implements	622,000	.30	19.14	11,904.00	100.00
Dairymen's, poulterers' and apiarists' supplies	522,500	.25	26.50	13,849.00	70.72
Totals	207,262,376	100.00	$19.84	$4,111,761.68	53.08

The manufacture of planing mill products is the largest industry. The principal items are flooring, ceiling, and siding. Red spruce leads all the others in quantity, and yellow birch and hard maple are the most important of the hardwoods. Beech is also used in large quantity. The hardwoods employed in smaller amounts are basswood, red oak, white oak, black ash, yellow poplar, white elm, and butternut. The average cost of the material used in this industry is $20.34. Thirty woods are listed, aggregating 85,626,750 feet.

Twenty-one woods are listed in the box industry, ranging from spruce, which constitutes sixty per cent of the whole, to cherry, the least in quantity. The softwoods lead by long odds, but the following hardwoods are manufactured into boxes and crates: Basswood, aspen, red oak, hard maple, white ash, yellow birch, white elm, black ash, beech, paper birch, butternut, rock elm, red gum, and cherry.

Vermont stone quarries require more than 8,000,000 feet annually of mineral crating. This is heavy stuff used to crate blocks of cut stone for shipment by rail and water. Any strong wood will answer, provided it does not contain sufficient tannin to stain the polished stone when in direct contact. The bark is removed from mineral crating to lessen the liability to stain the stone. Twelve woods are reported, but spruce furnishes more than half.

The furniture manufacturers of the state use 8,780,000 feet, consisting of sixteen woods, and white pine is the only softwood reported, and only 40,000 feet of it are used. Probably in no other region does the furniture business run so strongly to hardwoods as in Vermont.

In the manufacture of sash, doors, blinds, and general millwork loblolly pine, grown chiefly in Virginia and North Carolina, leads all others in amount. This is worthy of note, since Vermont is in a white pine region. Sugar maple, all of which grows in the state, ranks second in quantity. Seventeen woods are reported, eleven of which are hardwoods. White oak is most expensive at $80, yellow poplar second at $72. River birch at $15 is cheapest.

It is generally supposed that paper birch is the most important wood in the spool and bobbin industry, but it is not so in Vermont. This birch supplies less than ten per cent of the raw material, and is exceeded four-fold by sugar maple, two-fold by beech, and nearly two-fold by yellow birch. Other woods employed are red maple, basswood, and red gum. The last is the most expensive, red maple the cheapest. The average cost of all spool and bobbin woods is $13.18.

The inferior position occupied by hickory in the handle industry in Vermont is worthy of note. It is generally a leading wood in the manufacture of handles. It is at the bottom of the list in Vermont, constituting less than one per cent of all. White ash leads, followed in the order named by hard maple, paper birch, yellow birch, basswood, black cherry, and beech.

The woods employed by manufacturers of vehicles in Vermont are shown in the following table:

VEHICLES

Species	Quantity used annually Feet B. M.	Per cent	Average cost per 1,000 ft.	Total cost f. o. b. factory
Red oak	503,000	45.21	$19.85	$ 9,982.50
Yellow birch	322,400	28.98	19.16	6,177.36
White ash	126,500	11.37	23.73	3,001.42
Rock elm	40,800	3.67	22.23	867.03
Basswood	35,000	3.14	21.77	761.93
Sugar maple	32,900	2.96	20.04	659.32
Red spruce	20,000	1.80	25.00	500.00
White oak	18,200	1.64	26.90	489.87
Hickory	8,500	.76	55.59	472.50
Beech	3,200	.29	16.13	51.60
Balsam fir	1,000	.09	30.00	30.00
Tulip poplar	1,000	.09	60.00	60.00
Totals	1,112,500	100.00	$20.72	$23,053.53

As a general thing the Vermont manufacturers look carefully after waste—they throw away little that can be turned to account. Two classes of articles take most of the waste—chairs and boxes. The boxes include crating material. There are so many sizes and kinds of boxes that a piece of wood must be small and of odd shape if it can not be worked into some sort of a box or shipping package. The makers of various commodities have reported success in saving part or all of their waste material by working it into boxes. Some instances may be cited as follows:

A factory which makes butter boxes of beech and birch veneer converts all suitable left-overs into crating. Some sawmakers often have ash, oak, and hickory pieces, particularly spokes, which, because of some minor defect, are not fit for the purpose intended, but the defect may be cut out and a first-class ladder round is the result.

The cooperage industry draws some of its material from the waste heaps of other industries; but the saving thus made is of relatively small importance, because, as a general thing, coopers must have choice material, such as few waste piles supply. Instances are cited in Vermont, however, which show that coopers are alert to procure material wherever it is to be had at a bargain. Heading for some of the cheap grades of slack cooperage is made of hemlock and spruce waste from the sawmills.

The making of molding is a practicable means of turning loss into profit at some planing mills and factories. Molding is of numerous sizes and shapes, and there are few woods which are not fit for some kind. Edgings at sawmills, cut from wane-edged material or from pieces wider at one end than the other, are sometimes run through machines which convert them into salable commodities.

Toy makers and the manufacturers of games for children have learned how to make a profit out of the scraps which others throw away. Toy tenpins, mallet handles, and innumerable things which constitute the toy industry, can be worked from small pieces.

Sawdust and shavings were formerly absolutely worthless, except as fuel under the boilers, and there is still large waste along that line; but occasionally some of it is sold as fuel, or the baled shavings go to filtration plants, or for stable bedding.

Bobbins are of many sizes, and in some instances furniture and other factories can make bobbins at a profit by utilizing waste.

The manufacture of lath for plastering uses up large quantities of slabs and defective logs at sawmills. This commodity is usually made of softwoods because of the ease with which the lath may be nailed.



Naturalized Trees



Although the United States has more than five hundred trees that grow naturally here, and were in the forests when white men first visited these shores, a few have been brought to this country and have felt so much at home that they have run wild and appear to be fully able to take care of themselves. Some of these trees were imported and planted with the expectation that they would become useful, others were not intended to be other than ornamental. It should be borne in mind that comparatively few foreign trees have shown a disposition or developed an ability to run wild, no matter what chance they have had. The number does not much exceed a dozen, though hundreds of foreign species have been planted in the United States, in yards, gardens, orchards, and parks. The few which have escaped from cultivation and have been able to maintain themselves had had some peculiar advantage in possessing means of dispersing their seeds. In nearly all cases—perhaps in every case—where a foreign tree has become naturalized and has maintained its foothold without direct and intentional help from man, it has been fortunate in its ability to disperse its seeds widely and in abundance. To this must, of course, be added an ability to endure climatic conditions, and compete successfully with native species for room.

One important fact impresses the investigator who examines the matter of naturalized trees. They are, without a single exception, practically worthless for lumber. The wood of a few of them is good for a number of things, but the trees have never amounted to much in a practical way. They produce few sawlogs, and what they do produce are nearly always of poor form and inferior quality. A list of the most important naturalized trees will show this to be so.

Ailanthus (*Ailanthus glandulosa*) was introduced from China and has become widely naturalized in the eastern part of the United States, growing generally on the margins of cleared lands, particularly on abandoned farms. Except a little inferior box lumber there is no account that the wood has been used for anything.

White willow (*Salix alba*) came from Europe, and grows very rapidly, but it sticks so carefully to open ground that trunks are too short to be worth much for lumber, and if logs ever find their way to sawmills, it is the exception and not the rule. It is a common park tree and is generally found where the climate is too cold for the weeping willow to grow. The weeping willow (*Salix babylonica*) is also foreign, and is very abundant in the warm parts of this country, provided its roots receive all the water they need; but it has no value except as an ornament.

White poplar (*Populus alba*) came from Europe. It grows rapidly, and the wood is white, but the tree's form is usually poor, the trunk is apt to be diseased, and the branches are so brittle and weak that a brisk wind or a moderate sleet breaks them, and the way is opened for speedy decay. The wood has no commercial value. The tree may be known by the green, smooth bark on large trunks, and the small, woolly leaves which are white on the under side, to which the tree's name is due. The leaves collect and hold dirt to a shocking extent.

Black poplar (*Populus nigra*), represented in this country generally by a variety known as Lombardy poplar (*Populus nigra italica*) is a foreign tree, supposed to have come originally from Persia. It is too well known to need description. It is exceedingly limby, and the limbs lie close against the trunk, rising at a sharp angle. The trunks are so exceedingly knotty that lumber sawed from them resembles a crazy quilt. The growing trees are often considered a nuisance because of the multitude of sprouts which come up from roots, and because the roots clog sewers, wells, drains, and break through cellar walls.

The eucalyptus is an example of a foreign tree which grows rapidly but is of small value for lumber. The eucalyptus was brought to the Pacific coast from Australia. It is thoroughly naturalized in California.

The China tree (*Melia azedarach*) came from Persia and is well known in the southern states and on the Pacific coast. A variety, commonly called the umbrella China-tree, is well known on account of its round crown and short trunk, which resemble an open umbrella. The tree is running wild in the South and is becoming an inhabitant of the forest; but practically no use is made of the wood.

A number of foreign fruit trees are running wild in this country; but in their wild state they produce fruit of small value, and practically no lumber is made from the trunks. The peach is an example. It came to this country very early, and in the South it quickly ran wild. Some people have supposed that the peach was in America before the coming of white men. Early travelers frequently mentioned "Indian peaches." The fruit referred to by them was really the wild plum, and not the peach.

The mulberry is another foreign tree running wild in this country. In fact, there are two mulberries, the white and the paper mulberry, both from Asia. The fruit is poor and the wood of little value. Neither is comparable with the native mulberry, either for fruit or wood..

There has been little gained by naturalizing foreign trees in the United States. They have added nothing to the country's capacity to produce timber. Not one is equal to any one of scores of native trees. Even as ornaments little has been gained. Trees from the forests of this country are as handsome as any of those introduced, and possess most of the virtues and few of the faults of the foreign trees. Take for example sugar maple, yellow poplar, white pine, arbor-vitæ, evergreen magnolia, red cedar, and many more of the trees which are perfectly fitted to this country's soil and climate, and compare them with Lombardy poplar, ginkgo, ailanthus, China-tree, eucalyptus, Scotch pine, and the other common trees which have been introduced, and every point is in favor of the home product. Of course, if one is looking for freak trees, foreign specimens may score a few points, but for beauty, utility, vigor, strength, and reliability, everything is in favor of the native species of the United States.

One of the noticeably good things about the new President is that he is not given to talking too much, nor to running his business through the columns of the daily papers. He seems to be bent on sawing wood, and here's hoping he makes a good job of it.

The railroads are getting a lot of good money for freight that the lumbermen might just as well have a part of by making more dimension stock and eliminating the shipment of unnecessary waste.

The Passing of the Refuse Burner

Formerly the essential part of the equipment of every large sawmill was the refuse burner. Various types were developed some simple and cheap, others elaborate and expensive—but all had one object in view, namely, to get rid of the waste from lumber production. Slabs, bark, edgings, sawdust, shavings and ends from the equalizer were used to feed a fire which burned from one year end to another. The refuse burner is something that no millman can ever point to with pride. Its presence is a constant reminder that his methods are wasteful.

It is encouraging to note that an increasing number of mills are doing away with their refuse burners. This signifies that other means have been found for the disposal of the odds and ends resulting from the conversion of round logs into square products. The extent to which a concern utilizes its waste may be taken as a measure of its efficiency, just as the extent to which a country reduces its waste may, in a sense, be taken as an indicator of its development.

A distinction must be made between waste that is avoidable and waste that is unavoidable. In the latter case an actual loss is not involved, for the material unused could never be considered a potential asset. The distinction is by no means easy to make. Waste that is unavoidable under certain conditions may be an actual loss under different conditions. Lumbermen and wood users should not be blamed for discarding stuff which they cannot use except at an outright expense. On the other hand, everyone should be criticized who does not make his utilization as complete as possible.



STAVES AND CHAIR STOCK ARE CUT FROM THESE SLABS

There are three principal factors which retard waste utilization, namely, (1) lack of demand for the products which may be obtained, or unfavorable economic conditions which make their production too costly; (2) ignorance of the methods employed in other countries in which similar problems have arisen and of those employed in allied industries; (3) prejudice in favor of a staple article which has long been used for a specific purpose even though a new article may answer the purpose as well as or even better than the old one, and lack of business organization to overcome this prejudice.

In some respects these factors are out of the control of the millman, but in others they are wholly or partially controlled. Much depends on the operator himself. He may adjust his operations to the conditions or he may attempt to adjust the conditions to his operations. In one case he will be content with whatever outlets for his products are at hand; in the other he will find or even create new markets and stimulate new demands if the old are insufficient or unsatisfactory. No waste should be considered unavoidable until every possible means for its prevention has been considered. The healthy attitude for the lumberman is to consider every waste avoidable until he is positive it is not, and this cannot be settled once for all because times are changing and the wastes of today may hold the profits of tomorrow.

Many examples could be cited where a product has changed places with a by-product in relative importance. For example, until a few years ago chestnut extract plants had no other use for the spent chips than for burning under the boilers. Later a practical method of employing this material for wood pulp was perfected and as a result some of the paper mills began to use chestnut primarily for this purpose. In consequence the tannin extract became the by-product and glutted the market.

When rattan was first placed on the market only the hard, glossy, outer covering of the long stems was in demand, and the core or pith which makes up a large proportion of every stem was a by-product of little or no value. Conditions have changed and the flinty cane is now the by-product. The core of the small stems is smoothed down and those of the large ones cut into numerous small reeds or into flat pieces and used extensively in the manufacture of furniture, baskets, baby carriages, whips, canes and innumerable other articles of value. In present day methods there is no waste in this industry, for the very shavings have a value for mattresses, packing material and for pulp.

The following table compiled by the Forest Service in 1907 gives what is believed to be a conservative estimate of the milling waste of various hardwoods. They are the result of extensive inquiry and investigations covering the whole field. The reports from all the mills answering inquiries showed a total production of 1,873,246 cords of slabs, trimmings, edgings, etc., of which 469,511 cords, or 25 per cent, were burned for fuel at the mills; 822,526 cords, or 44 per cent, were sold as fuel, and the remainder, 581,209 cords, or 31 per cent, was burned in the refuse burners. These figures apply both to hardwoods and softwoods. This 31 per cent represents an absolute waste. The absolute waste in sawdust is estimated at 10 per cent of the total production, about 90 per cent being used for fuel. The waste shown in the last column is all absolute waste, except possibly in a single case, although some of it is used as fuel in the form of sawdust or attached to the slabs.

PRIMARY WASTE IN MILLING HARDWOODS

Species	Total Volume of Logs	Slabs, trimmings and edgings	Absolute waste in trimmings and edgings	Sawdust	Absolute waste in sawdust	Bark
	M Cubic Feet	M Cubic Feet	M Cubic Feet	M Cubic Feet	M Cubic Feet	M Cubic Feet
Oak	608,000	134,000	42,000	85,000	9,000	79,000
Maple	153,000	34,000	10,000	21,000	2,000	20,000
Poplar	140,000	31,000	10,000	20,000	2,000	18,000
Chestnut	110,000	24,000	8,000	15,000	2,000	14,000
Beech	70,000	15,000	5,000	10,000	1,000	9,000
Birch	62,000	14,000	4,000	9,000	1,000	8,000
Basswood	62,000	14,000	4,000	9,000	1,000	8,000
Cottonwood	45,000	10,000	3,000	6,000	1,000	6,000
Total	1,250,000	276,000	86,000	175,000	19,000	162,000

The time seems ripe for doing away with all refuse burners and the methods they typify. The subject of closer utilization has been discussed until it has become tiresome. All millmen profess to be willing to change their methods as soon as practical and profitable processes have been devised, but too many of them leave it to the other fellow to do all the work. One lumber journal says

that the attitude of many operators in this regard is much like their advertising: When prices are good they say, "What's the use?" and when times are bad they exclaim, "My God, I can't afford it." In the meantime the opportunities are likely to get away from them.

Suppose we take a look at some mills without refuse burners or scrap piles and see what is happening. At Boyne City, Mich., three mills are operated by one company, each cutting from 60,000 to 90,000 feet daily. Logs are cut down to a diameter of six inches at the top. Everything is made into lumber that will give a board 6 feet long, 6 inches wide and 1 inch thick. The trimmings, slashings and slabs are all thrown onto a conveyor and carried to a "slab room," where they are sorted. The hemlock refuse is put on a separate conveyor and dumped into a bin, the bark and wood refuse being used in a local tannery for tanning purposes and for fuel. Sometimes the hemlock wood refuse goes to pulp mills. The hardwood refuse is separated in the slab room into "slabs" and "hog material."

A slab is any piece 32 inches long covered with bark on one side and on the other showing wood 1½ inches thick on one edge and a surface width of 4 inches for half the length of the piece. These slabs are piled in the yard. Part of them are sold to chemical plants and part for firewood. The cheap rates by water enable the operator to sell wood to Chicago customers. In either case about $1.75 per cord is secured. The amount of wood produced depends on the size of the logs, in the case of small sizes reaching as high as 1½ cords per thousand feet of lumber sawed.

The "hog material" is the smaller refuse, edgings, etc., part of which is used for fuel in the mill, the remainder, about two box-car loads per 90,000 feet of lumber produced, going to the chemical plants for fuel.

Some of the large mills at Cadillac, Mich., own their own acid or chemical plants. Waste is also utilized by the operation of novelty works in connection with the plants, and spools, spindles, toys, wooden clubs, mallets, balls, etc., are turned out.



CLEAR OAK CHAIR STOCK, 2"x 2"-18". ALL CUT FROM SLABS.

Along portions of the eastern shore of Lake Michigan are important saline deposits in the soil. The underground water is pumped up and evaporated to obtain the salt. At Ludington and Manistee the waste from the sawmills is used for fuel in evaporating the water, and from the slabs are cut staves for making barrels to contain the salt.

The smaller mills in Michigan have good markets for fuel wood. Last year a manufacturing concern in Grand Rapids paid some of the small concerns seventy cents a ton for sawdust delivered on cars. To be sure, it went for fuel, but that was much better than burning it in the open or in a burner to get rid of it.

At the government mill at Neopit, Wis., as the slabs, trimmings, etc., come from the slasher, they are picked first for lath stock, then for picket stock, and finally for crating and box material. All species go into lath and board material, but only pine and basswood are used for picket stock. There was not much of a market for this material when operations began, but a careful survey of the situation revealed opportunities for a good profit on the by-products. Several markets have been developed in Chicago and even as far away as the central prairie states and New York, proving that transportation and market problems are not prohibitive.

In Connecticut, on the other hand, where excellent opportunities exist for close utilization of all wood material, it is not an unusual thing today to find small mills cutting out ties of 8-foot chestnut logs and making no effort whatever to save the enormous waste in the slabs. Ask the millman why, and he will tell you that there is no market for such material. As a matter of fact tie boards are a staple product and are in constant demand.

This tendency of many people to follow the path of least resistance is well illustrated by two tie makers, one in Connecticut and the other in Pennsylvania. The former was engaged last winter in cutting some good hickory timber into ties—timber that would make first-grade handles. His explanation was there was no market for handle bolts, but that there was for ties.

The Pennsylvania man converted a grove of black walnut into twenty sets of switch ties which he sold to the Pennsylvania Company at the same price as white oak. When the inspector expressed surprise that the owner would thus dispose of 50,000 feet of so scarce a wood, the man replied that he didn't want to go to the trouble of looking up another market since the railroad was so handy.

In many ways the acid plant is taking the place of the refuse burner and affords profitable returns. The opportunities in this line are just beginning to be appreciated. As yet little success has been had from the destructive distillation of sawdust and the finer refuse, but the prospects are promising. Although three hardwoods, beech, birch and maple, comprise 90 per cent of the material used for destructive distillation, recent tests by the Forest Service show that a commercial yield of acetate of lime and wood alcohol can be obtained from hickory, oak, tupelo and red gum. In fact, mill waste consisting of oak and red gum is now being used by at least one plant. Moreover, the commercial methods used in hardwood distillation are generally crude and only part of the possible products are obtained. Tests have shown that it is possible to increase the yield of acetate of lime 50 per cent over present practice.

The foregoing are only a few suggestions regarding the great question of closer utilization. We hear much of scientific management and the great results that can be obtained by the correct application of the most efficient methods. Why should not the same thought and care and application produce similar results in making American milling methods as efficient as they are now extensive.

S. J. R.

The sawmill slab fire looks more like a thing burning up gold dollars now than it ever did before, and we are now beginning to reduce this unclassed fire loss.

The wooden railway tie has stood up to more competition than any other item on the wood list, and it is still in the center of the stage—with a creosote make-up on.

If those Mexicans would only get over the revolution habit and settle down to business once more it would mean the restoring of a big item to our furniture trade, and that in turn would help swell the demand for hardwood lumber. We do not feel the need of it much now, but some time we may.

Too much competition in timber buying when the demand is lively can work just as much disaster as too much competition in lumber selling when the demand is slow. Keep together and don't get excited.

Salesmen are really just as useful when the demand exceeds the supply as they are at other times, but it is a little harder to see just why.

Annual Lumber Cut and Values

Editor's Note

Preliminary figures of the lumber output by states in 1911 were published in HARDWOOD RECORD Jan. 10, 1913. The article which follows contains the same statistics with much additional information, including the relative rank of states in production, per cent of increase or decrease, per cent of distribution, and a table in which, for the first time, figures are brought together showing the values of lumber by species for the twelve years from 1899 to 1911, inclusive.

The Bureau of the Census, in co-operation with the Forest Service, has published statistics of the output of lumber, lath and shingles in the United States for the year 1911. One of the first things to attract attention in examining the report is the fact that the number of sawmills from which reports were received in 1911 was 20,000 less than the number reporting in 1909. The remarkable decrease in number is explained by the method pursued in collecting the statistics for the two periods. In 1909—that being the year of the decennial census—every mill in the country that could be reached was included; but in 1911 it was decided that no attempt would be made to include mills whose output was less than 50,000 feet a year. The decline of 20,000 in the number of mills was not actual, but only apparent. If all of those small mills had been included, the showing of the total lumber cut would not have been increased 3 per cent, for it is the large mills that cut the bulk of the lumber.

Apparently much of the fluctuation shown in statistics of lumber output for the past dozen years has been due to the different degrees of completeness of the returns, though there doubtless have been considerable differences in the actual cut.

The following table summarizes a large amount of lumber statistics for the whole country, covering three years.

LUMBER, LATH AND SHINGLES—NUMBER OF ACTIVE MILLS REPORTING AND QUANTITY OF LUMBER CUT, WITH PER CENT OF INCREASE AND PER CENT DISTRIBUTION, BY STATES: 1911, 1910 AND 1909

STATE	RANK IN PRODUCTION 1911	1910	1909	NUMBER OF ACTIVE MILLS REPORTING 1911	1910	1909	LUMBER SAWED Quantity (M feet b. m.) 1911	1910	1909	Per cent of increase[1] 1910 to 1911	1909 to 1910	Per cent distribution 1911	1910	1909
United States				28,107	31,934	48,112	37,003,207	40,018,282	44,509,761	7.5	−10.1	100.0	100.0	100.0
Washington	1	1	1	777	951	1,143	4,064,754	4,097,492	3,862,916	−0.8	6.1	11.0	10.2	8.7
Louisiana	2	2	2	502	497	658	3,566,456	3,733,900	3,551,918	−4.5	5.1	9.6	9.3	8.0
Mississippi	3	3	3	908	1,061	1,796	2,041,615	2,122,205	2,572,669	−3.8	−17.5	5.5	5.3	5.8
Oregon	4	4	9	522	574	696	1,803,698	2,084,633	1,898,995	−13.5	9.8	4.9	5.2	4.3
North Carolina	5	8	4	2,071	2,368	3,307	1,798,724	1,824,722	2,177,715	−1.4	−16.2	4.9	4.6	4.9
Arkansas	6	7	5	1,127	1,260	2,060	1,777,303	1,844,446	2,111,300	−3.6	−12.6	4.8	4.6	4.7
Wisconsin	7	5	8	771	872	1,241	1,761,988	1,891,291	2,025,038	−6.8	−6.6	4.8	4.7	4.5
Texas	8	6	7	430	466	719	1,681,080	1,884,134	2,099,130	−10.8	−10.2	4.5	4.7	4.7
Minnesota	9	12	12	467	499	745	1,485,015	1,457,734	1,561,508	1.9	−6.6	4.0	3.6	3.5
Michigan	10	9	10	796	898	1,323	1,466,754	1,681,081	1,889,724	−12.7	−11.0	4.0	4.2	4.2
West Virginia	11	13	13	994	1,069	1,524	1,387,786	1,376,737	1,472,942	0.8	−6.5	3.8	3.4	3.3
Virginia	12	10	6	2,006	2,286	3,511	1,359,790	1,652,192	2,101,716	−17.7	−21.4	3.7	4.1	4.7
Alabama	13	11	11	1,112	1,358	2,188	1,226,212	1,465,623	1,691,001	−16.3	−13.3	3.3	3.7	3.8
California	14	14	18	222	252	305	1,207,561	1,254,826	1,143,507	−3.8	9.7	3.3	3.1	2.6
Pennsylvania	15	15	14	1,630	1,847	3,054	1,048,606	1,241,199	1,462,771	−15.5	−15.1	2.8	3.1	3.3
Florida	16	18	17	293	345	491	983,824	992,091	1,201,734	−0.8	−17.4	2.7	2.5	2.7
Tennessee	17	17	16	1,536	1,774	2,643	914,579	1,016,475	1,223,849	−10.0	−16.9	2.5	2.5	2.7
Maine	18	19	19	817	856	1,243	828,417	860,273	1,111,565	−3.7	−22.6	2.2	2.1	2.5
Georgia	19	16	15	952	1,265	2,083	801,611	1,041,617	1,342,249	−23.0	−22.4	2.2	2.6	3.0
Idaho	20	21	25	209	229	304	765,670	745,984	645,800	2.6	15.5	2.1	1.9	1.5
Kentucky	21	20	21	1,452	1,660	2,372	632,415	753,556	860,712	−16.1	−12.4	1.7	1.9	1.9
South Carolina	22	22	20	641	693	1,048	584,872	706,831	897,660	−17.3	−21.3	1.6	1.8	2.0
New York	23	23	22	1,520	1,468	2,308	526,283	506,074	681,340	4.0	−25.7	1.4	1.3	1.5
Ohio	24	25	27	1,009	1,148	1,632	427,161	490,039	542,904	−12.8	−9.7	1.2	1.2	1.2
Missouri	25	24	23	1,112	1,325	2,076	418,586	501,691	660,159	−16.6	−24.0	1.1	1.3	1.5
New Hampshire	26	26	24	397	474	708	388,616	443,907	649,606	−12.5	−31.7	1.0	1.1	1.5
Indiana	27	27	26	915	1,044	1,604	360,613	422,963	556,418	−14.7	−24.0	1.0	1.1	1.3
Massachusetts	28	30	28	430	459	643	273,317	239,206	361,200	14.3	−33.8	0.7	0.6	0.8
Vermont	29	29	29	498	542	725	239,254	284,815	351,571	−16.0	−19.0	0.6	0.7	0.8
Montana	30	28	30	126	140	180	228,416	319,089	308,582	−28.4	3.4	0.6	0.8	0.7
Maryland	31	32	31	389	431	729	144,078	154,554	267,939	−6.8	−42.3	0.4	0.4	0.6
Oklahoma	32	31	32	174	234	380	143,869	164,663	225,730	−12.6	−27.1	0.4	0.4	0.5
Connecticut	33	33	34	218	256	420	124,661	126,463	168,371	−0.4	−24.9	0.3	0.3	0.4
Illinois	34	35	33	384	452	827	96,651	113,506	170,181	−14.8	−33.3	0.3	0.3	0.4
Colorado	35	34	35	156	169	250	95,908	121,398	141,710	−21.0	−14.3	0.3	0.3	0.3
New Mexico	36	36	37	47	54	80	83,728	83,544	91,987	0.2	−9.2	0.2	0.2	0.2
Arizona	37	38	38	12	13	21	73,139	72,655	62,731	0.7	15.8	0.2	0.2	0.1
Iowa	38	37	36	160	186	350	59,974	75,446	132,021	−20.5	−42.9	0.2	0.2	0.3
Wyoming	39	41	42	75	81	89	33,309	30,931	28,602	7.7	8.1	0.1	0.1	0.1
New Jersey	40	40	39	136	156	276	28,639	36,542	61,620	−21.6	−40.7	0.1	0.1	0.1
Delaware	41	39	40	82	89	151	23,853	46,642	55,440	−48.9	−15.9	0.1	0.1	0.1
South Dakota	42	42	41	28	35	54	13,046	16,340	31,057	−20.2	−47.4	(2)	(2)	0.1
Utah	43	44	44	62	63	88	10,573	11,786	12,038	−10.3	−6.7	(2)	(2)	(2)
Rhode Island	44	43	43	20	24	57	9,016	14,392	25,489	−37.4	−43.5	(2)	(2)	0.1
All other states[3]				5	11	11	11,786	12,594	15,946	−6.4	−21.0	(2)	(2)	(2)

[1] A minus sign (−) denotes decrease. [2] Less than one-tenth of 1 per cent. [3] Includes Kansas, Nebraska, and Nevada.

The name yellow pine includes a number of species cut in nearly thirty states. The largest cut comes from the three southern pines, longleaf, shortleaf and loblolly; but other trees contribute, among them being Cuban pine, scrub pine, pond pine, sand pine, spruce pine and pitch pine. The combined yellow pine output exceeds that of any other group of trees. Douglas fir, which is second in quantity, is a single species, and white pine includes not only the wood always known by that name but also Norway and jack pine. The oaks are a group, and more than twenty species contribute. What is listed as western pine is principally the yellow pine which grows west of the Rocky Mountains. In most instances the woods listed in the tables are groups of trees, not single species. This is the case with cedar, hemlock, spruce, maple, birch, basswood, hickory, elm, ash and cottonwood. Not less than 150 species are cut in the United States, but most of the lumber on the market comes from fifteen or twenty. Among the minor woods sawed into lumber are cherry, mahogany, buckeye, locust, magnolia, Japanese oak, Osage orange, willow, African walnut, alder, apple, butternut, Circassian walnut, cucumber, dogwood, eucalyptus, Honduras corkwood, prima vera, mulberry, myrtle, persimmon, sassafras and silverbell.

The cut of shingles in the United States is shown in the table which follows:

Kind of Wood	SHINGLES PRODUCED 1911 Quantity (thousands)	1911 Per cent distribution	1910 Quantity (thousands)	1910 Per cent distribution	1909 Quantity (thousands)	1909 Per cent distribution
Cedar	9,633,914	79.5	10,108,643	77.9	10,963,817	73.5
Cypress	1,230,645	10.2	1,180,217	9.1	1,386,722	9.3
Yellow pine	650,332	5.4	863,149	6.7	1,293,565	8.7
Redwood	395,786	3.3	437,701	3.4	506,651	3.4
White pine	83,809	0.7	146,555	1.1	283,213	1.9
Chestnut	40,840	0.3	52,091	0.4	91,766	0.6
Hemlock	26,171	0.2	42,447	0.3	76,029	0.5
Western pine	15,882	0.1	27,277	0.2	68,934	0.5
Spruce	12,381	0.1	68,745	0.5	147,132	1.0
All other	24,107	0.2	49,537	0.4	89,542	0.6
Total	12,113,867	100.0	12,976,362	100.0	14,907,371	100.0

The lath used by plasterers are largely a by-product at sawmills and are manufactured from slabs and crooked or defective logs. Practically every kind of wood which passes through sawmills may be made into lath, but it is impossible to segregate the woods and determine how much is used of each of the various kinds. The manufacture of this commodity is reported from every state except Nebraska, North Dakota and Rhode Island. The principal product is from ten states, as shown below:

Minnesota	402,962,000
Louisiana	355,516,000
Washington	338,578,000
Wisconsin	319,973,000
Maine	199,602,000
Michigan	178,404,000
West Virginia	129,601,000
Pennsylvania	118,923,000
Mississippi	103,594,000
Arkansas	100,046,000
All other	723,911,000
Total	2,971,110,000

A valuable feature in the report of 1911 was not found in former reports of lumber production. It is a summary of values at the mill, and includes the years 1899, 1904, 1906, 1907, 1908, 1909, 1910 and 1911. Thirty of the country's leading woods are shown, and by comparing values in 1899 with those twelve years later, it is found that the average value increased thirty-five per cent in that time. The table follows:

AVERAGE VALUE OF LUMBER PER 1,000 FEET, BOARD MEASURE, BY KINDS OF WOOD, FOR SPECIFIED YEARS: 1899 TO 1911

Kind of Wood	1911	1910	1909	1908	1907	1906	1904	1899
All kinds	$15.05	$15.30	$15.38	$15.37	$16.56	$16.54	$12.76	$11.13
Softwoods								
Yellow pine	13.87	13.29	12.69	12.66	14.02	15.02	9.96	8.46
Douglas fir	11.05	13.09	12.44	11.97	14.12	14.20	9.51	8.67
White pine	18.54	18.93	18.16	18.17	19.41	18.32	14.93	12.69
Hemlock	13.59	13.85	13.95	13.65	15.53	15.31	11.91	9.98
Western pine	13.88	14.26	15.39	15.03	15.67	14.01	11.30	9.70
Spruce	16.14	16.62	16.91	16.25	17.26	17.33	14.03	11.27
Cypress	20.54	20.51	20.46	21.30	22.12	21.94	17.50	13.32
Redwood	13.99	15.52	14.80	15.66	17.70	16.64	12.83	10.12
Cedar	13.86	15.53	19.95	18.03	19.14	18.12	14.35	10.91
Larch	11.87	11.85	12.39	11.81	13.07	11.91	8.94	8.00
White fir	10.64	11.52	13.10	11.38	15.45	12.91	(*)	(*)
Tamarack	(*)	13.30	13.18	12.86	15.71	15.63	12.42	12.48
Sugar pine	17.52	18.68	18.14	17.78	19.84	16.11	(*)	12.30
Balsam fir	13.42	14.48	13.99	14.36	16.16	(*)	(*)	(*)
Lodgepole pine	12.41	14.88	16.25	(*)	(*)	(*)	(*)	(*)
Hardwoods								
Oak	19.14	18.76	20.50	21.23	21.23	21.76	17.51	13.78
Maple	15.49	16.16	15.77	16.30	16.84	15.53	14.94	11.83
Tulip poplar	25.46	24.71	25.39	25.30	24.91	24.21	18.99	14.03
Red gum	12.11	12.26	13.20	13.08	14.10	13.46	10.87	9.63
Chestnut	16.63	16.23	16.12	16.27	17.04	17.49	13.78	13.37
Birch	16.61	17.37	16.95	16.42	17.37	17.24	15.44	12.50
Beech	14.09	14.34	13.25	13.50	14.30	14.05	(*)	(*)
Basswood	19.20	20.94	19.50	20.50	20.03	18.66	16.86	12.84
Hickory	22.47	26.55	30.80	29.66	29.50	30.42	23.94	18.78
Elm	17.13	18.67	17.52	18.40	18.45	18.08	14.45	11.47
Ash	21.21	22.47	24.44	25.51	25.01	24.35	18.77	15.84
Cottonwood	18.12	17.78	18.05	17.76	18.42	17.15	14.92	10.37
Tupelo	12.46	12.14	11.87	13.36	14.48	14.13	(*)	(*)
Sycamore	13.16	14.10	14.77	14.67	14.58	(*)	(*)	11.04
Walnut	31.70	34.91	42.79	42.53	43.31	42.25	45.64	36.49

* Not reported separately.



Stopping the Rainy Day Leaks



It is an interesting fact that the lumber trade is subjected to greater loss from bad weather than any other line of business. Even slight consideration of the fact will show the truth of the statement, growing out of the fundamental condition that the work of lumbering is necessarily done in the open. Rainy weather interrupts operations in the yard more than anywhere else, perhaps, for at the mill it is possible to go on sawing, even though the lumber is not immediately distributed, whether the rain falls or not.

A young hardwood man who has not been in the business so long that everything appears common-place and uninteresting, got busy with his lead pencil one rainy day in April, when operations in the wholesale yard with which he was connected were discontinued to await the pleasure of Jupiter Pluvius. The inspectors, three in number, were having a delightful game of craps in the back office; a number of cars were standing on the siding, accumulating demurrage bills steadily and inexorably; while the truckmen, who were on day wages, were sitting under the lee of a big pile and swapping yarns of more or less questionable hue.

The inspectors were paid, all told, $10 a day; car service was $1 a car a day; and the truckmen got in the neighborhood of $8. As the inspectors could load from four to five cars a day, that item was pretty definitely fixed, so that there was at least a dead loss of about $23 a day. This was not all, of course, inasmuch as the interruption came at a particularly busy time, when customers wanted stock badly, and when loss of business might easily follow from failure to ship promptly.

There is little question about unfavorable weather constituting a big burden on every lumberman operating a yard. The only thing that is not settled is how to dispose of the loss in the most satisfactory way. The lumberman who did the figuring referred to above found at least a half-way solution that would take care of the unloading problem. That was simply the erection of a shed over the lumber dock.

He got figures on what it would cost to build a shed that would cover enough space to enable three cars to be unloaded, and learned that the expense would be in the neighborhood of $750. As 6 per cent interest on $750 is only $45 a year, it appeared that the loss suffered on two rainy days would be sufficient, if recovered, to make the shed a good investment. He put the question up to the boss, and got favorable action on it, resulting in the shed being put up and unloading being continued in wet weather.

The lumber was not distributed, of course, as this was impossible on account of the fact that the truckers wouldn't work and the lumber would be damaged by being rained on. It was, however, laid down in the shed, enabling the cars to be moved and additional unloading work carried on. While all of the loss was not disposed of, and only part of the handling work completed, the advantages gained were sufficient to make everybody connected with the yard feel that the erection of the shed was well worth while.

It was also of advantage during hot weather, since it was a good deal more comfortable for the inspectors, as well as others employed in handling lumber, to work under its shade than to swelter in the sun without any protection whatever. This is a little point frequently lost sight of, but it is a valuable consideration, nevertheless.

A southern sawmill man who studied the problem of reducing losses through rainy day interruptions found out one way of doing it that helped some. He was one of those who believe in remanufacturing lumber which can be increased in value by ripping or cutting off. Consequently his inspectors were instructed when loading out to lay aside any boards which were worthy of this attention. These were placed in a shed near the loading dock, and accumulated fast enough to make a pretty fair day's work occasionally.

When the rain fell and regular yard operations were stopped, the chief inspector devoted his attention to having the lumber in the shed ripped and cross-cut when necessary. He used his regular yardmen in the work of running the machine, power for which was furnished by a motor connected up with the light dynamo of the plant, so that there was no trouble about getting current. The men who were used in this work would ordinarily have done nothing all day, and their labor could consequently be considered as costing very little. The big increase in value of the remanufactured lumber, therefore, made a mighty good showing from the standpoint of the man who originated the idea.

At the same mill experiments have been made with a permanent covering for piles which would enable work to be carried on in the rain, and lumber to be handled under all conditions of weather, assuming that the truckers could be persuaded to work in the wet. The idea is novel enough to warrant description, though some may complain of a lack of practicability. The plan involved the erection at each of the four corners of the pile of an upright, surmounted with an iron pipe or rod which was jointed and capable of being raised and lowered. At the top of the pipe, and extending over the pile, covering it completely, was a waterproof covering of some description. Asbestos cloth was one of the materials suggested, though ordinary tarpaulin, tarred to protect it better, would doubtless answer the purpose.

With this rig in position, a pile would be protected from the time it was started. As it rose, the covering would be raised by means of pulleys which controlled the position of the movable rods. At no time would the lumber be exposed to the elements, and at no time would it be necessary to use boards for covering. As far as handling the lumber in bad weather is concerned, this would be taken

care of in good shape, since the inspector could go ahead measuring and tallying without getting a drop of rain on him, unless it were a particularly hard storm. In ordinary rainy weather the men would probably continue working, especially if they were paid a small bonus.

Here again is the matter of protection from the sun, which in the South is a point worth special consideration. Inspectors on top of a lumber pile, protected from the torrid rays of Old Sol by a tarpaulin, would certainly not have to stop so often as at present to wipe the perspiration from their brows or cuss the fate that landed them in a lumber-yard. Better working conditions are being striven for by those in many other lines; why not in the lumber business?

A practical point in connection with this suggestion is that the cost of boards used in covering piles is no inconsiderable item. A few years ago cull lumber was so worthless than nobody thought anything of the use of the material for covering piles. But with prices high and manufacturing costs also rising, it must hurt the prudent man to see thousands of feet of lumber having a real, tangible, market value being put to use in covering lumber piles. It takes nearly 100 feet to cover a pile, and that means a cost of probably $1 for material for every pile.

This does not take into account the labor involved in placing the covers, nor the damage to lumber which is left uncovered for a considerable period, as happens in nearly every yard, where piles are seldom properly covered until they are completed. Inasmuch as board covers have to be frequently renewed, while a cover such as that suggested would last for ten years or longer, a yard with any permanence of occupation would find this arrangement a good investment. It sounds a little chimerical at present, because nobody does it; but study of the proposition impresses one with the fact that there is an opportunity here either in the direct application of the idea as outlined or in some adaptation of it.

Another way to make use of rainy-day time is in the manufacture of stacking sticks. One sawmill man who was running a new operation confessed that he used up half a day's time in the mill every month making sticks for the piles; but after finding out that he could not afford to do this he installed a circular saw in an unused part of the mill and put yardmen to work manufacturing this material on days when rain interfered with their regular occupations. In this way he made sure of having plenty of sticks at hand all the time, and also manufactured them at a much smaller cost than when the work of the big mill was interrupted for hours in the petty job of making them.

In this connection it is worth noting that most successful yardmen make a point of putting their stacking sticks under cover when not in use, instead of allowing them to lie around alleys and be broken and split, as they realize that the value of the material and the cost of manufacture are now great enough to warrant attention to this minor but yet important detail.

Those who are considering methods of eliminating waste may profitably turn from material to labor in this instance, at least; and general study of losses because of rainy weather, and method of obviating them, would doubtless result in additional suggestions of immediate practical value. G. D. C., Jr.

The Lumberman's Utopia

The end of the old time lumber manufacturer and wholesaler is in sight. His days are numbered as sure as the flight of time. Yet he is the cause of his own downfall. He has not kept step with the times and with the newest methods. He has been content with things as they were.

Competition was never keener than it is today. If a manufacturer has the stock and it is good lumber, but his correspondence department and his representatives are not up to the modern ideas of merchandising, the lumber will remain where it is. A great many readers will take exception to this statement, but the writer has been a close student of and has followed the practical lines of modern merchandising, and having been on the "firing line" for the past six years, he knows whereof he speaks. He has seen concerns with but small capital start in the wholesaling game—men who had the capacity—who have fairly shot ahead and acquired mills and cuts of other mills and gone ahead of the older and established concerns simply because the latter had not kept pace with the times.

Some of the older concerns do not realize the value of personality, yet business in the future will be done more on this factor than on any other. The second factor is service. Why is it that you, on entering a store of any kind where you have been trading, select a certain salesman to wait on you? Because that man has come to know you and your requirements. He studies you (although in most cases you do not realize it) and knows what will best please you. He knows your tastes. You go to him because in your makeup you have a slight touch of vanity (we all have) and because he gives you service. We demand these two factors today, although most of us do not realize it in that way. It is an unconscious factor.

In olden times, lumbermen put out anyone to sell their lumber and because business was done in that way, they sold the stock. Some concerns still think the same way. It is a well-known fact that the lumber business even today, with but few exceptions, is the most poorly conducted of any large business. Lumber ranks fourth in the business of this country and it ought to be a science. Can you think of any other business where the credit end is run in the way it is in lumber? Anyone can buy lumber today—can always get credit from some one. Lumbermen "guess" that this man or that one can make good and offer him a line of credit. True, they may get some of the agency reports but regardless of that fact, the lumber is sold just the same. Or the reverse—lumbermen refuse to sell some of the best concerns in the country just on account of the reports. The whole trouble is lack of education.

There are no lumber schools at present, but the future will see many. There is no systematic training of lumber salesmen. There is no training of inspectors according to the rules by a competent and recognized authority. There is no attempt to study the conditions at a customer's plant in conjunction with an agency report as well as the results of personal observation by a representative who is capable of judging conditions. And why? Because all the lumbermen (or most of them) go by the "rule-of-thumb" methods and are content with things as they are. Lumbermen look on advertising as a necessary evil and place their "standing-cards" in the trade papers, and kick every time their bills come in, saying that they wish they didn't have to support this editor or that one. What a power they miss in not making that space work for them and bring them business! Then the waste at the sawmill. Little attempt was made by the manufacturers to study this problem. It had to be done for them.

Take any other commodity, such as coal, steel or iron. Examine their methods of distribution, of handling the manufacturing end, of sales-methods and of organization. Every plant is trying to "go one better" by elimination of waste, quicker handling, efficiency in every department, scientific research by experts, and is striving always to get the best men to better their organization. Ever hear of anything like that in the lumber business?

Probably one of the worst evils in the lumber business is the matter of inspection. There should only be one set of rules. However, the future will bring that to a head—it should have been done long ago. It is just as bad to sell a particularly high grade of lumber as it is to sell a particularly low grade. And do you know,

that that is just the reason for the failure of all co-operative selling in the lumber business. Perhaps you have never thought about it in that way. Take the case of a big pine organization. It operates several mills in North Carolina, one mill making practically the same stock as another. Yet customers in dealing with this concern specify the mill from which a certain grade is to come, because there is better value in that grade from that point. The writer is given to understand that certain concerns in the South formerly pooled their outputs and the stock was sold by a central organization in a large southern city. The same thing happened—customers would specify from which mill the stock was to come and as a consequence some of the mills were oversold all the time, while others had to curtail their outputs. This ended in dissatisfaction and finally broke up the organization. Why? Just from the variance of grade and manufacture. An efficiency engineer or an organizer from an entirely different line of business would have gone in there and corrected the faults. But lumbermen aren't "up to the times" in these matters. They "know their business too well" and outside help or new methods are not wanted. There is no attempt to see "why" these methods are wrong. Each man waits for the other to bring out some solution of the problem and the consequence is, they are all waiting and will continue to wait.

. The lumber business of the future? The writer is not a prophet but necessity will soon convince lumbermen in general of the fact that to stay in business they will have to change all their methods. It is all very well to sit back with a smile and say "Well, I guess we needn't worry; there will always be a demand for lumber." Granted. But if the lumbermen hadn't been "asleep at the switch" they never would have allowed the substitution of concrete, steel and other commodities that have put the consumption of lumber down each year. The other lines mentioned got their foothold on the consumer by aggressive national advertising and it has already been said that one cement manufacturer spends more in a year for this class of advertising than the combined money spent by every lumber manufacturer in the United States. That speaks for one modern method anyway, and if you want to see how concrete has cut into the consumption of lumber you will find on looking up the matter that the use of cement has increased twice as much as lumber.

When the government conceived the idea of a lumber trust, it pushed the matter to the fullest extent and finally discovered what we all know—that simply because the lumber business is the most backward and unorganized business of today, there couldn't be a trust. You may not think that public opinion has anything to do with the sale of lumber or the use of it, but good-will is such a factor today that many concerns consider it the best part of their assets and show it as such on their statements.

In the future, and it won't be so many years from now, there will be one set of inspection rules. There will be a chief whose qualifications will be unimpeachable and he will be surrounded by deputy inspectors for each wood. There will be a thorough training school where each local inspector will get his training from the deputies on each respective wood. The inspectors attached to the consuming factories and lumber yards throughout the country will be required to be trained in the school before their concerns will be able to buy lumber. When changes of the rules are necessary the consumers will be told of the proposed changes, allowed to make suggestions and to discuss them with the members at their meetings.

Manufacturers will realize that their logical duty is at the manufacturing end and will devote their time to getting the maximum efficiency out of their plants and their logs, as well as improving their methods of handling and elimination of waste motion, and so reduce their costs.

Credit and the extension of credit will be judged from the "capital, capacity and character" standpoint with "capital" as the least factor of the three "c's." Business will be done on personal solicitation and personality with, of course, the stock to back up the representation. Salesmen will be trained not only to know the stock they are representing, but scientific salesmanship as well. A man will be expected to know not only lumber, but its use, proper drying of each wood in the customer's own kilns, finish, etc.

Lumbermen will learn to use advertising as it should be used—to bring business and as a means of education similar to what other manufacturers in other lines of business are doing.

These things and others mean the dawn of a new era in the lumber business, and then it will be the science it ought to be today.

H. E. S.

Production of Excelsior

The Bureau of the Census has compiled the first fairly complete statistics ever published, showing the annual production of excelsior in the United States. The figures are for 1911. Excelsior consists of fine ribbons of wood, cut by special machinery, and of various degrees of fineness. In Europe it is made of texture so fine that the excelsior is used in hospitals in place of absorbent cotton. The article in the United States is employed as packing material for dishes, lamps, hardware and other articles liable to be broken in transportation. Some of the better grades are used in cheap upholstery. The first excelsior in this country was made more than fifty years ago, but the demand was small and increased slowly. By 1880 the wood demanded for its manufacture amounted to about 60,000 cords yearly. In 1911 the demand had increased to 142,944 cords, equivalent to approximately 85,000,000 feet, board measure.

Excelsior is made of both hardwoods and softwoods, but the former supply most. The best grades are of basswood, but cottonwood leads in quantity. New York and New Hampshire lead in the cottonwood product, but it is probable that aspen is listed as cottonwood in these states, since the common cottonwood is not particularly abundant there, but aspen is. Wisconsin leads in basswood, and Virginia in pine. Twenty-seven states contribute to the supply, and 122 plants manufacture the article. The total amount weighs 139,830 tons. It is of interest to note that the quantity of excelsior produced per cord of wood varies within rather wide limits. In Virginia the average is 2,286 pounds, Wisconsin 1,757, New York 2,092 and New Hampshire 2,132. The average for the whole output of the country is 1,956 pounds per cord of wood consumed.

The Wood Flour Business

There were imported into this country for the fiscal year ending June 30, 1912, according to the figures of the Bureau of Statistics, 6,365,375 pounds of wood flour. The import value attached to this was $30,802, that paid an import duty of 35 per cent ad valorem, making the duty paid for this item for the year $10,780.70. This is not a big item when we compare it to many other items in our import list, but when we look at these figures and consider the fact that there are tons and tons of sawdust going to waste in this country that could be made into this same wood flour and that we have been enjoying a protective duty of 35 per cent to encourage home manufacture, they are quite startling and suggest that we have been rather backward about seizing opportunities to develop and make money out of all of our resources.

This wood flour business is a growing industry and is beginning to enter into several lines of consumption. One of the important uses seems to be in the making of dynamite, but from time to time there develop various other uses. Investigation as to present and possible uses is all that is necessary to profitable manufacture in this country. The process consists merely of drying and regrinding sawdust. Wood flour seems to be a hardwood sawdust product rather than a pine product, which is well, because the pine sawdust has other substances in it that can be extracted and used otherwise, and the hardwood sawdust may prove to be worth more in the form of wood flour than for chemical reduction. With the figures given above before us, it would surely seem that the wood flour business is worth going after and developing as a means of utilizing part of our waste hardwood sawdust.

Boucherie Process of Preservation

Recent announcement has been made by the U. S. Forest Service of the use of the Boucherie process in the preservative treatment of telephone poles for lines under construction in the Tahoe National Forest in California. This process is so different from those ordinarily employed that description of it should prove of interest.



COVER, PACKING AND CLAMPS FOR MAKING CHAMBER ON BUTT END OF POLE

The process takes its name from M. Boucherie, a Frenchman, who devised it over seventy years ago. In brief, his first idea was to introduce the preserving liquid into standing trees by the natural movement of the sap. A notch was sawed into a tree near its base and surrounded with a special basin containing the liquid. As the sap rose, the liquid was drawn into the vessels and carried upward throughout the entire living portions of the tree.



BUTT END OF POLE SHOWING METHOD OF CONNECTING WITH PIPE CONTAINING PRESERVATIVE

A modification of this method consisted in boring some small holes near the foot of the standing tree and inserting tubes connnected with a barrel containing the preservative. The action was much the same as in the other case. These methods were found to be impracticable and the inventor devised the present process that is in use in Germany and France, but has never been accorded a fair trial in this country.

The present method is applied to green, felled timber from which the bark has not been removed or broken. Instead of the natural sap current of the live tree taking up and distributing the fluid, hydrostatic pressure is used to force the preservative in, displacing and expelling the sap.

This is accomplished by placing the trunks or poles nearly horizontally on a timber framework or cross logs. The liquid, usually one part copper sulphate to one hundred parts water, flows through a pipe or hose from a vat or barrel which is supported on a platform from twenty-six to thirty-two feet above the ground. This pipe connects with another running along under the butt ends of the poles and has a T-connection opposite each pole. A short hose fits on this and connects it with a tap or spigot which enters a chamber formed at the butt of the pole by putting on a ring of packing and clamping a board cover over it.

When the cover has been adjusted, the tap is opened allowing the sulphate of copper to flow from the vat into the chamber at the butt of the pole. The pressure due to the height of the tank above ground is sufficient to drive the liquid through the sapwood and expel most of the sap at the small end of the pole. At first only pure sap issues, but eventually it becomes mixed with the injecting solution. This excess liquid is not allowed to waste but is collected and pumped to the vat to be used again after strengthening by the addition of more of the chemical.

Wood for treatment by this process should be freshly cut and still full of sap. Stems are topped, branches cut down to short snags, the bark left uninjured, and the injecting done as soon as possible. If the butt end has dried it should be cut again before treatment. Logs kept in water and not allowed to dry out retain for a long time the ability of being injected.

The duration of treatment varies from two to three days. Once the connections are made, however, little attention is needed other than to keep the tank pumped full of preservative and to see that leaks do not occur. Data is lacking to prove the efficiency of the treatment in this country, but the fact that the process is still in use in Europe indicates that it has merit. The Forest Service has been treating western yellow pine, white fir, Douglas fir, sugar pine and others, and expects a life of from twelve to fifteen years as against a probable three years under natural condition of the wood. The process can employ zinc chloride or any aqueous solution and is applicable to any species of wood, and as the cost of a plant is very small in comparison with the ordinary plants used in timber treating, it appears worthy of careful consideration. It is reported that one company in California erected such a plant this spring.

The observation might be pertinent that the two factors which have retarded the development of timber preserving processes more than anything else have been first the expense of treatment, and secondly the uncertainty of complete impregnation of the material to be treated with the preservative fluids. The Boucherie process should overcome these obstacles because it is very inexpensive and because by the very nature of the process complete penetration is insured.



VIEW OF THE POLES BEING TREATED

Northern Hardwoods in Florida

The popular impression seems to be that Florida is a land of swamps, jungles and winter resorts; but there is a great fund of forest wealth within the borders of the state, and hardwoods play a much more important part than is generally considered even in lumber and forestry circles. It has been conservatively estimated that 47 per cent of all the tree species found in the United States occur in Florida and that practically all of this per cent is represented by hardwoods. In fact, the only conifers found there are longleaf, shortleaf, scrub and Cuban pines, the southern white and the red cedars, and the cypress. HARDWOOD RECORD published an article last fall on the tropical hardwoods of southern Florida. Above this region and including the central part of the peninsula, the Cuban and longleaf pines are almost the only trees found.

But in northern Florida we find a great variety of common northern hardwoods finding their southern limit here. The Forest Service in Bulletin 83 (Forest Resources of the World) estimates that out of a total land area of 35,000,000 acres, only 20,000,000 acres of 57 per cent is forested. Recent investigations, however, have shown that a considerably larger per cent, probably 75 per cent, is now classed as being covered by some kind of forest growth.

The principal lumber product of the state is, of course, yellow pine (including longleaf, Cuban and shortleaf pines) and cypress. These are being cut over so rapidly that in recent years considerable attention has been paid to the available hardwood supply. This situation is largely induced by the fact that this region is somewhat removed from the large sources of the hardwood supply, such as the southern Appalachians, Ohio valley and the lower Mississippi valley, and every advantage is being taken of the local supply to meet the demands of furniture, cooperage, veneer and the local wood-using industries that demand hardwoods in their products.

This demand is seen in the Forest Service statistics of average prices secured for the different species of hardwoods cut in Florida. It is a notable and interesting fact that oak, red gum, hickory, ash and tupelo bring better average wholesale prices at the mill in Florida than in any of the important hardwood producing states. For example, oak in 1910 brought an average of $27 per thousand at the mill, red gum $18.50, hickory $39.47, ash $30.75 and tupelo $16.92. Florida is not an important hardwood state from the viewpoint of large production, but a very great variety of woods is cut there and they are all in strong demand as is evidenced by the above prices. As compared with these, the average prices secured for the same hardwoods in one of our great hardwood states, Kentucky, are as follows: Oak $17.93, red gum $12.37, hickory $22.47, ash $21.65 and tupelo $12.50. Although there may be some slight inaccuracies in these statistics, yet they could not account for the uniformly wide discrepancies as indicated above.

To one accustomed to the typical northern hardwoods such as hard maple, beech, black birch, elm, hickory, ash, etc., it is a surprise to find the same trees growing to good merchantable size and height in such a southern climate. In fact, nearly all of the great variety of important hardwoods that occur throughout the eastern United States may be found in northern Florida.

The topography in part of this section is somewhat hilly for the southern coastal plain, and elevations of around five hundred feet above sea level are quite common. On these rolling slopes one finds a great variety of oaks, such as the red, white, post, Spanish, cow, live and black oaks along with two of our common northern hickories (*Hicoria alba* and *glabra*). But the greatest variety of hardwoods is found along the stream bottoms and along the swampy places below where the longleaf pine grows. In company with the cypress, the water hickory, tupelo and water gums, water oak, willow oak, sweet bay and magnolia are the common trees. On the less moist situations, one finds a great variety of trees, the principal ones being red gum, yellow poplar, hard and soft maples, beech, Florida basswood, black walnut, elm, hackberry, sycamore, cucumber, honey locust, holly, persimmon, white, red, green and water ashes, hackberry, black and river birches, cottonwood and sourwood.



TYPICAL SWAMP GROWTH. TUPELO WATER HICKORY, CYPRESS, WATER GUM AND RED GUM.

All of the trees mentioned above are logged and utilized for poles, posts, ties and similar purposes. Besides the above list there are a great number of species which reach commercial size, such as the willows, chinquapin, red mulberry, hornbeam, sassafras and a great variety of oaks. In fact, there are known to be at least fifteen separate species of oak in this limited region.

The principal trees represented in the lumber cut in order of quantity are as follows: Yellow poplar, hickory, oak, cottonwood, ash, tupelo gum, red gum and maple. This list shows that the principal available trees are also some of our most valuable hardwoods. The heaviest stands in Florida are found in the swamps and along the stream courses. The yellow pine stands run from only about 3,000 to 12,000 board feet per acre with an average of about 5,000, whereas stands up to 50,000 board feet per acre are common with the hardwoods and cypress. However, the average is around 15,000 feet per acre. Yellow pine stumpage runs around $4 per thousand, cypress $4.50 to $6, and hardwoods from $4 to $10, depending on species and location.



RAFTING LOGS TO THE MILL, CHOCTAWHATCHEE RIVER, NORTHERN FLORIDA.

In lumbering, advantage is frequently taken of the stream courses in which to float the logs to the mill. As stated above, most of the hardwoods lie along the streams or in association with the cypress so that water transportation is the most feasible means of getting the logs out. Railroad logging is the prevailing method used with the yellow pine, and some of the hardwoods that grow along the smaller streams on the pine barrens are transported on the cars. Instead of the common loose driving, rafting is employed to get out the cypress and hardwoods. A large raft such as is shown in the accompanying illustration is the usual type. Owing

to the fact that the cypress and hardwoods are apt to sink en route to the mill, they are usually chained or spiked to prevent "dead heading." Girdling is also practiced to some extent so that the logs will float in transit to the mill, but rafting is found to be a cheap as well as a safe method.

Yellow poplar grows to the largest size of the trees, and specimens up to five and six feet in diameter are not uncommon. The hickories, oaks, red gum and ash also grow to splendid size here, and the lumber produced is generally said to be entirely satisfactory both as to quality and as to dimensions of the lumber.

Most of the hardwood lumber finds a ready local market. Owing to the scarcity of hardwoods in this region, they are in constant demand to supply the trade not only for furniture and general hardwood purposes, but for veneers, slack cooperage, implement and wagon manufacture, etc. Florida sends out enormous quantities of fruits and vegetables as well as being the leading state in turpentine and rosin products. For these purposes, a great amount of crates, boxes, barrels, etc., are in constant demand. N. C. B.

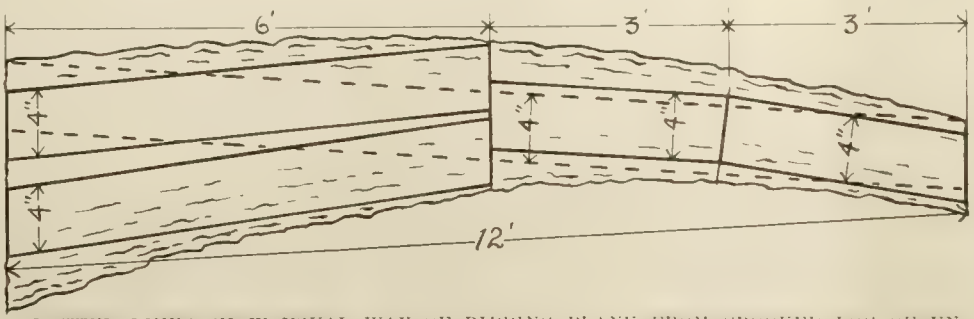


Profit Paying Sawing Wrinkles



Knots, crooks, swelled butts and a few kindred characteristics of timber make up the list of general abominations to the average sawyer in the hardwood mill. The sawyer finds it comparatively easy by the exercise of a little care to handle straight, smooth logs with a minimum of waste and get a pleasing and satisfactory product from them; he has only to study and watch his heart cracks and general contour of the log in placing it on the carriage. He can generally slab straight through and get a reasonable face to start on, and he also gets straight-grained lumber that works out to his notion without any great worry.

Along comes a swelled butt or a crooked log, though, and then his troubles begin. He not only makes some cross-grained stock, but it is difficult to get a face and square up without a lot of waste of material in slabs with heavy ends and big humps in them.



DOTTED LINES SHOW USUAL WAY OF RIPPING PLANK FROM CROOKED LOG OF UNEVEN DIAMETER; SOLID LINES SHOW METHOD OF CUTTING TO PROCURE HALF AGAIN AS MUCH LUMBER WITH STRAIGHT GRAIN IN EACH PIECE

Let us take the typically crooked log, for example, one with a heavy bow in it. This rolls on to the carriage and is practically always placed with the bow at one of four points, either directly outward toward the saw, straight up, against the blocks, or straight down. More commonly the bow is turned straight out or straight up. It matters not which of these four positions it starts in; the result of working the log down to a square is that on one side there are edging boards that are wide in the middle and tapering to a point at each end. Opposite this are boards which are wide at each end running out to a point in the center, and from the other two sides of the log come edging boards that are crooked, which, though they may show a four or six-inch face all the way through, are impossible for edging down to a four-inch or six-inch board because this face crooks like a bow bent for action. Then the resultant lumber in the log is a cross-grained product not much for strength, difficult to dress to a smooth finish in cabinet work, and more inclined to warp and twist than lumber from a straight log.

One of the best things done with crooked timber is to reduce it to short lengths. This is so well known that it is done without argument to whatever extent seems practical, when people are cutting logs in the woods. However, the log cutter in the woods is so accustomed to working logs ten to twenty feet that he seldom thinks of reducing logs to six feet for the sake of reducing crooks. One good way, therefore, to reduce the trouble and loss from crooks in logs is to do more cross-cutting of the logs at the mill before they are sawed into lumber.

The matter specifically in mind, however, is that of sawing up logs and making the most out of those that have crooks which are not easy to eliminate by cross-cutting them into halves or what would be termed short logs. Certain ideas along this line have suggested themselves and with these and the general problem in mind, the writer spent part of one forenoon watching a sawyer handle logs in a mahogany mill.

Here, as with the hardwood mill, there were many logs with crooks, and even if they are cut comparatively short, they still may frequently be crooked. These the sawyer handled in the regulation hardwood way, usually with the bow out, and in reducing them down to square-edged dimensions there naturally resulted many short boards, some tapering out toward the center and some toward the ends, while those from the sides were too crooked to get through the edger and produce square-edged lumber. It was noticed, too, that after squaring up the logs these crooked ones were cut into thick planks or flitches, and instead of going to the lumberyard they were taken from the discharge end of the mill to the dimension stock plant where they were manufactured into short squares and other dimension stock of standard sizes.

Here is a suggestion for the hardwood man and his crooked logs. They do not make good plank or timbers. Sometimes they can be worked into low-grade plank for railroad crossings or something of that kind, but it seems that some of this hardwood might be treated like the mahogany; that is, taken to the dimension stock plant and reduced to squares and dimensions of short lengths.

It was the edging boards, though, that have puzzled this particular concern, and in connection with which some ideas are already brewing. One of these crooked side boards was laid off with lead pencil in such a manner as to demonstrate that here, too, it had been figuring over this problem and was trying to demonstrate possibilities of cross-cutting before edging. This was a side board from a crooked log that was larger at one end than the other; consequently the face of the board not only curved, but was broader at the one end. The board was approximately twelve feet long and the first six feet of the broad end had been marked off into two four-inch strips, and the next six feet had been marked to cut in two midway and to produce a four-inch strip in each section. In other words, from this one crooked board, which in its original state would hardly edge up and make a good four-inch strip twelve feet long, were secured by this means two four-inch strips six feet long and two strips three feet long. They were not only better, too, as to square edge, and free from wane, but by cutting the crooked board in the section this way it was practicable to follow the grain so that the strips were not so cross-grained, consequently were in much better shape to work.

This means that the ideal way—and the one that had been brew-

ing in the mind of the writer—to handle side boards from the crooked logs is to cross-cut them before edging. This involves a departure from the regular order of business in the sawmill, but it is a departure that can usually be arranged for without seriously disturbing the regular order of business. It is simply a matter of arranging to pass these boards back to the cross-cut saw before they go to the edger and of then returning them to the edger. In the early days of lumbering when timber values were only nominal it was perhaps not worth while to go to this extra trouble, but today good hardwood timber is worth so much that one can well afford to alter the regular routine a little and go to some trouble to obtain either one of two results—get more material out of the same log, or improve the grade of the material.

So far it has been the side boards from the crooked logs that have been the center of attention—that is, the boards coming from the sides of the crooks and being crooked like the logs. There are two sets of boards of this kind from each crooked log, and then there are two sets of edging boards of another kind—those made from the hump of the crook on one side, that are wide in the center and go to a point toward the end, and those from the concave of the log which are wide at each end and go to a point in the center. The latter are in a class with slabbings from a swelled butt log, which start wide at the end and go to a point. To an extent they can be worked into shorts and to dimension, but since they are cross-grained they are not received so well in this as they might be. There are instances, however, of people actually making money out of this very cross-grained feature of these boards. Veneer men have taken these and formed them together in panels of four pieces so that they make a beautiful figure combination. It is a modification of this that makes the much-desired figure of crotch mahogany, and often in mahogany and walnut it is from just such defects as crooks and swelled butts that a veneer manufacturer obtains those fantastic figures which when fitted together in panels bring an enormous price.

In plain oak it is seldom possible to get any such fantastic figures as are obtained from walnut and mahogany, but often there may be obtained from trimming and watching these very short end boards from crooked logs a beautiful figure combination which when made up into panels will actually be worth more than good lumber from straight-grained logs. Things of this kind have been done with veneer and they can also be done with solid boards. It was this idea brewing in the mind of the writer which led to the visit to the mahogany mill, and there some confirmation of it was received. The idea it is desired to put forward here as a possible profit making wrinkle in sawing hardwood, is that these short end and center pieces from the concave and convex sides of crooked logs be handled separately from the regular run of lumber, with the purpose in view of making them up into panels and realizing a special price for them. The slabbing from swelled butts go into the same class, and often there are burls and knots which spoil a part of the log for the regular lumber classification, the product of which may be turned to value through this same channel. J. C. T.



Fancy Hardwood Floors



Parquetry or wood mosaic is usually considered as representing about the highest attainment in the way of fancy or expensive hardwood floors. Many patterns of this work are both fancy and expensive, but it quite often happens that the parquetry flooring manufacturer has occasion to make other kinds of flooring that put a new meaning to the word fancy and sometimes add a new figure to the matter of expense.

While talking shop with a parquetry manufacturer recently, he incidently displayed an order for some flooring, the price of which was thirty cents per square foot. This sounded like a pretty good figure to pay even for hardwood flooring, and it led to a discussion of the many special patterns that are called for, and brought out a new definition to the word fancy. The new definition construes fancy to mean the making of whatever particular pattern or kind of floor some architect or builder may suggest. This still leaves fancy in a way synonymous with expensive, because peoples' fancies often take a turn that calls for expensive work even though it may not look so elaborate as some other work.

For example, there is a noticeable disposition among the people of New York and Washington to copy after the woodwork of luxuriant steamships and yachts. One man will want a heavy teak flooring because teak is a favorite wood for steamship flooring. One may fancy a straight flooring of teak which is comparatively expensive in itself, partly because the material is costly, but also partly because it is hard to work and this adds materially to the cost. The flooring machine with the knives ground and put in order so that they will run a half day on oak and then need whetting, after running an hour on teak must be taken off and ground, not merely whetted. This is because the teak, while it is of a somewhat oily nature and has apparently no greater degree of hardness than some of our oak, really contains a gritty substance in its make-up that dulls planer knives and other cutting tools rapidly. So the man who buys teak flooring has not only to pay the original price of the wood but pays an extra price for difficulties involved in manufacturing it.

A method of copying after ship decking in patterns for floors is the use of boards, six or eight inches wide, square jointed, put down with counter sunk screws over the heads of which are put alternating round plugs and dovetailed keys. This style seems to be one of the leading favorites in Washington and New York City. Sometimes stock may be fitted closely together at the end and at times may be tongued and grooved, but the more elaborate floor of this class is made by putting these wide boards down, leaving a crack $\frac{3}{16}$ or $\frac{1}{4}$ of an inch, and then filling in those cracks with an inlay strip of mahogany, walnut or some other fancy wood to get a striped effect. This stripe, the dovetail keys and the round plugs make the ornamental features of the floor. The work may be varied at times by using alternate wide and narrow strips, laid with borders and various other features, but one of the characteristics of this imitation of fancy ship decking in floors is the dovetail key and the round plug with the open joint and the inserted strip of dark wood.

The parquetry manufacturer talked to has quite a trade in the East, built up largely on the theory of catering to the desires of those who want to do something unusual or unique in the flooring line. He makes it his business to supply a buyer as nearly as possible with what he wants, and to charge him accordingly. That is the reason for those flooring prices that run up into such fancy figures now and then. Of course the manufacturer in mind has also parquetry patterns and flooring ideas of his own that he pushes, but one of the most interesting features of his work is that of supplying the material for fancy floors, which often involves searching all over the country for the different kinds of wood asked for, and always calls for a lot of mechanical ingenuity to successfully carry out the various details of the work. It is an interesting work and the resultant product is one of the best ornamental uses of hardwood.

It is not how much lumber you get through the mill, but how much money you get for it that counts for most, and very often you can get more money by putting less through and doing the work better.

Because you carried on your business a certain way last year is not much argument for carrying it on the same way next year, for time brings changes and the wheels of progress move pretty rapidly these days.

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 450—Moonlight on Lake Michigan

North Tonawanda, N. Y., May 12.—Editor HARDWOOD RECORD: The cover picture on your issue of May 10 has attracted my attention quite considerably, as photography is quite a hobby of mine, and one that takes a good deal of my time outside of business hours.

I write to ask if in making this moonlight proof you did not use what we might call "artistic license," and do what is generally done in making pictures to obtain this effect, namely, taking a snapshot of the sun. C. E. KELSEY.

The writer has been advised that as he assumes the picture in question in reality is not a "moonlight" picture, but was taken at sunset, and as the result showed a moonlight effect on the water, the picture was inscribed "Moonlight on Lake Michigan." So far as we know, no moonlight picture has ever been accomplished by employing the moon as a lighting agent.—EDITOR.

B 451—Wants to Market Black Oak

London, E. C., May 9.—Editor HARDWOOD RECORD: The object of our letter is to inquire whether you would be good enough to furnish us with the addresses of firms who are in a position to act as agents for the sale of black oak. The class of oak we are offering on account of shippers is in Europe very highly valued, and we should therefore be glad to have an idea of the possible price to be obtained on your markets.

Our friends propose consigning a quantity of logs to your market, in view of which we should be obliged if you could tell us the best port for this consignment and charges that may be incurred in handling a shipment as suggested.

We are forwarding to you, this mail, a small sample of the oak for the purpose of showing the color, and furnishing you with an idea as to the class of oak our friends have for disposal.

We trust our queries have not encroached too much upon your courtesy, and permit us to express our thanks in advance.

The specimen of oak accompanying this letter is a quarter sawed piece very similar in character to Mississippi valley oak, which has probably been injected with a dark coloring matter or partially vulcanized to obtain the nearly black tone which pervades throughout it.

The writer, who is a London timber agent, has been advised that it is doubtful if this material would appeal to but very few furniture and interior finish manufacturers in the United States, but that possibly it would be desirable in the production of parquetry flooring. He has been referred to the leading parquetry manufacturing house in the United States, and one or two others who might possibly be interested in this product.—EDITOR.

B 452—Lumber Estimating Book

Shreveport, La., May 17.—Editor HARDWOOD RECORD: Is there such a thing as a National Hardwood Estimating Book, or any publication covering this line of work? If so, kindly advise where we can secure same. ——— LUMBER COMPANY.

The writer has been given a list of addresses of publishers of sundry works on lumber estimating.—EDITOR.

B 453—Who Produces Mahogany Flooring?

Washington, D. C., May 16.—Editor HARDWOOD RECORD: We would appreciate very much if you could advise us what concerns manufacture mahogany flooring. ———.

The lumber concern making this inquiry has been advised that mahogany flooring is not a general article of manufacturing commerce save in the production of parquetry and mosaic flooring. It has been supplied with the addresses of several concerns who manufacture this product. Any others interested can have the address on application.—EDITOR.

B 454—Seeks Sundry Information

London, E. C., May 8.—Editor HARDWOOD RECORD: We will be glad if you can put us in touch with manufacturers of clothespins, pick and tool handles, mangle rollers, dowels and knife cut veneers, which we can buy in carload lots and pay for through our agents in the States. ———.

This London house has been given quite a comprehensive list of manufacturers of the various items named. Any others interested can have the address on request.—EDITOR.

B 455—No Interruption in Business

Boston, Mass., May 13.—Editor HARDWOOD RECORD: Thinking that possibly our friends in the trade may have seen the newspaper reports of a fire that we had May 6, we wish you would insert in your news columns a statement from us to the effect that while a considerable section of our dry-houses and part of our yard were totally destroyed, we had a very large, complete stock in other sections which was not damaged, and would like to have the trade realize that we will not be crippled in any particular, being well covered with insurance and having as fine a stock of fancy veneers and mahogany lumber as it is possible to carry; also a complete line of air-dried and kiln-dried lumber. We can execute orders with our usual promptness and care.

Thanking you in advance, we remain.

PALMER & PARKER COMPANY.

B 456—Rosewood Handles and Dimension Stock

Milwaukee, Wis., May 17.—Editor HARDWOOD RECORD: Can you tell us where rosewood handles are made, and can you give us the names of manufacturers of rosewood dimension stock? THE HANDLE TRADE,
H. H. Apple, Manager.

The writer of the above letter has been advised that comparatively few rosewood handles are produced, the majority of the fancy handles resembling rosewood in some particulars being made of cocobola. He has also been advised that possibly he can secure rosewood clippings and dimension stock from Ichabod T. Williams & Sons, New York City, and C. L. Willey, Chicago, Ill.—EDITOR.

B 457—Wants Export Connection with Manufacturers of Oak

Liverpool, May 6.—Editor HARDWOOD RECORD: We will be glad if you can put us in touch with good, reliable shippers of oak planks and lumber for export. This stock would have to be shipped from Baltimore or Norfolk to obtain satisfactory freights. ———.

Anyone interested in the foregoing inquiry, which is from a leading Liverpool timber house, can have the address on request.—EDITOR.

B 458—Seeks Dimension Stock

St. Louis, Mo., May 14.—Editor HARDWOOD RECORD: We have been referred to you by Cobbs & Mitchell, Inc., Cadillac, Mich., they advising us that you could perhaps give us the names of some manufacturers who are prepared to furnish us with our requirements of dimension stock, a list of which we herewith enclose.

WOODEN WARE COMPANY.

The attached list referred to involves a large series of dimension sizes to be made from hard maple, beech, birch and ash, specifying that the stock is to be clear and free from defects that would in any wise weaken the pieces. The writer has been referred to several manufacturers of dimension stock of this character. Any others interested in developing considerable business in this material can have the address on request.—EDITOR.

B 459—Seeks Ironwood Bolts

Boston, Mass., May 13.—Editor HARDWOOD RECORD: We have a customer who wants two or three cars a month of hornbeam bolts, and would be very grateful if you would supply us with the names of manufacturers of this material. Stock is wanted in the rough in logs 4' long and 6" and up in diameter inside the bark. ———.

The writer of the above letter is a leading Boston wholesale lumber concern, and it has been suggested to it that probably the best source of supply for hornbeam or ironwood bolts will be in the northern portion of the southern peninsula of Michigan. It has been given a list of several concerns who might be induced to supply this material. Any others interested can have the address on request.—EDITOR.

B 460—Wants to Market Oak and Ash Squares

Memphis, Tenn., May 13.—Editor HARDWOOD RECORD: If not imposing on your good nature wish you would inform us where we could market small ash and oak squares, say from 1½" square to about 3" square, either green or dry. ——— LUMBER COMPANY.

The writer of the above letter has been supplied with a brief list of buyers of oak and ash dimension. Any others interested can have the address on request.—EDITOR.

B 461—Wants to Market Black Walnut Logs

New Bethlehem, Pa., May 10.—Editor HARDWOOD RECORD: We have a friend who has over a hundred black walnut trees, a number of them at least 2½' in diameter, that he wishes to sell in logs. Will you kindly give us the names and addresses of responsible houses who purchase walnut logs and lumber? ——— LUMBER COMPANY.

The writer of the above letter has been referred to several black

walnut buyers. Any others interested can have the address on application.—EDITOR.

B 462—Seeks Basswood for Export

Liverpool, May 19.—Editor HARDWOOD RECORD: We have several large buyers of basswood boards both in prime and No. 1 qualities. Can you tell us of a source of supply for this wood? We can secure several large orders if prices are right. ———.

The writer of the above letter, which is a leading Liverpool house of timber brokers, has been given a brief list of manufacturers of basswood. Any others interested in the inquiry can have the address on application.—EDITOR.

B 463—Interested in "General Grant's Living Monument"

Brooklyn, N. Y., May 9.—Editor HARDWOOD RECORD: I am very much interested in the cover picture of the April 25 number HARDWOOD RECORD, being a member of the U. S. Grant Post, G. A. R. of the city of Brooklyn, and know they would be very much interested in further data concerning the tree which the general planted. Can you give me further facts about this, and can I get a good photograph of the same?

FRANK K. FAIRCHILD

The writer of the above letter has been advised that all the information we have on the subject of the elm planted by General Grant was published in the issue of HARDWOOD RECORD referred to. He has been further advised that we can supply him with a bromide of the photograph in question.—EDITOR.

B 464—Seeks American or Canadian Doors

Liverpool, May 2.—Editor HARDWOOD RECORD: We shall be glad if you can put us in touch with manufacturers of American and Canadian doors of a good third quality. We supply a very large proportion of the Swedish timber used in this country for building purposes, and if we can get in touch with the door manufacturers we should be able to move from 10,000 to 20,000 doors in the first year, with a very good prospect of increasing it to 50,000 if we can secure a good brand at a reasonable price. ———.

The above letter is from a large timber importing house and has been supplied with a list of large manufacturers of American doors. Any others interested can have the address on application. —EDITOR.

B 465—Seeks Curly Maple

Syracuse, N. Y., May 9. Editor HARDWOOD RECORD: We want to buy some curly maple in 4/4, 6/4 and 8/4 thicknesses either firsts and seconds or No. 1 common and better grades. We do not want any birds-eye and the lumber must be dry enough to put in the kiln at once.

The above inquiry is from a leading chair manufacturing house. Anyone who can supply this lumber is invited to advise us, that we can communicate the address to the writer.—EDITOR.

B 466—Seeks Ash Handle Bolts

New York, May 15.—Editor HARDWOOD RECORD: Can you give us the names of some reliable manufacturers of ash dimension stock for turning into handles for hay forks, about $1\frac{1}{2}$" square, 4' to 7' long? ———.

The writer of the above letter has been given a brief list of producers of ash dimension. Any others interested can have the address on application. EDITOR.

News Miscellany

Meeting of Eastern Commissary Managers

The annual meeting of the members of the National Commissary Managers' Association in the East was held at Lynchburg, Va., May 21 and 22. This meeting embraced only the southeastern states, in which membership to the association is maintained. The usual order of business was followed and many interesting talks delivered. Some of the subjects were handling of correspondents, handling cash sales, figuring costs, eliminating losses in leaks and increasing sales.

Reunion of Confederate Veterans at Chattanooga

While the prospective reunion of the United Confederate Veterans, which will take place at Chattanooga, Tenn., on May 27-29, has no direct bearing upon the lumber business, still in an indirect way it brings to mind a condition with which all those associated with the hardwood business in the South are at least unconsciously familiar. The advance of industry has swept away the traditional hatred of the Yankee, and of late years his coming into the South has been welcomed by the more progressive southerners. In fact, it is unquestionably true that the bulk of development in most of the southern states is directly the result of northern energy and capital, or at least northern energy plus southern capital.

The fact that the reunion is to be at an important lumber center might be of interest to hardwood men who get to Chattanooga occasionally. This year is the semi-centennial of the famous battles of Chickamauga, Missionary Ridge, and the Battle Above the Clouds upon the heights of Lookout Mountain. This is the first time the reunion has been held on these old battlegrounds since 1890, and it is expected that there will be an attendance of survivors and descendants from all over the country. Chattanooga is making elaborate plans for the entertainment of the visitors.

Grand Rapids Lumbermen's Association Annual on May 27

The annual meeting of the Grand Rapids Lumbermen's Association, as arranged by the committee composed of L. L. Skillman, Carl Schneider and W. E. Vogelsang, will take place on May 27. There will be two tickets in the field, the "stand-patters" offering for president W. R. Smith; vice-presidents, Gerald McCoy and Henry Schneider; secretary, A. M. Manning; treasurer, W. E. Vogelsang. The "progressive" ticket will consist of V. L. Crossman for president; A. P. Newton and W. R. Smith, vice-presidents; Zeno Nelson, secretary, and Carl Schneider, treasurer.

Program of National Hardwood Meeting

The National Hardwood Lumber Association has just issued invitations and programs for its forthcoming convention at the Hotel Sherman, Chicago, June 5 and 6. In addition to the membership of over eight hundred and fifty, more than three thousand additional firms received invitations. The association invites every manufacturer and wholesale dealer, consumer, and others interested in hardwood lumber to attend the meeting. The program follows:

Thursday, June 5. 10 a. m. Registration and reception of members and guests in convention hall, second floor, Hotel Sherman.

10:30 a. m. Address of welcome, Murdock MacLeod, president Lumbermen's Association of Chicago; response, John M. Woods. Address by the president, Charles H. Barnaby. Report of secretary-treasurer, Frank F. Fish. Forestry Committee, John M. Woods. Transportation Committee, Emil Guenther.

12:30 p. m.—Intermission for lunch.

2 p. m. Special Committee on Overweight Claims, James E. Stark. Address, Harry A. Wheeler, president Chamber of Commerce of the U. S. of A. Waterways Committee, Ed T. Miller. Inspection Rules Committee, J. M. Pritchard.

PROGRAM OF ENTERTAINMENT

Banquet. Thursday evening, June 5, at 8 o'clock, in banquet hall, Hotel Sherman. Admission by ticket only. Secure tickets at registration desk at entrance to convention hall.

ENTERTAINMENT FOR LADIES

Thursday evening, June 5, at 8 o'clock, the ladies will be given a dinner in the Italian room (main floor of Hotel Sherman). Admission by ticket, obtainable at ladies' registration desk (convention hall floor).

Friday, June 6. 10 a. m. Convention called to order. Report of Committee on Officers' Reports. New Business.

12:30 p. m.—Intermission for lunch.

1:30 p. m.—Unfinished business. Election of officers to serve one year; seven directors to serve three years; one director to serve one year; one director to serve two years.

PROGRAM OF ENTERTAINMENT

Friday evening, June 6, at 7:30 o'clock—Smoker, vaudeville and buffet luncheon in banquet hall (convention room floor). No tickets necessary.

ENTERTAINMENT FOR LADIES

Friday evening, June 6, a theater party will be given for the ladies. Secure tickets at ladies' registration desk (convention hall floor).

After theater—Luncheon, music and informal dancing in banquet hall, Hotel Sherman (convention hall floor).

Important—Please register early, registration desk, entrance convention hall.

Next Meeting of Conservation Congress Slated for November

It is announced from the office of the president of the National Conservation Congress that the fifth congress will meet at Washington, D. C., toward the middle of next November. Among the important subjects to be considered will be water power and forestry problems. One of the chief objects of the congress is to decide on conservation policies which will be urged on the state and federal governments for practical application. Formal notice of the congress will be issued later.

Postponement of Arkansas Lumbermen's Trip

The much discussed proposed trip of the Lumbermen's Club of Arkansas to cover every important sawmill point in the state has been postponed from May 19 to October 20. The chairman of the board of arrangements who makes the announcement of the postponement, says that it is due to the flooded conditions at the mill points in eastern and southeastern Arkansas, and that it comes at the request of owners of these plants. The action was taken by the special committee after having received many communications from lumbermen in the flooded sections.

Memphis Lumbermen in Semi-Monthly Meeting

After transacting such business as came before it at the Hotel Gayoso, Saturday, May 17, the Lumbermen's Club of Memphis adjourned for the summer months.

One of the principal features of this meeting was the detailed report of John W. McClure who went to Washington to attend the weight hearing before the Interstate Commerce Commission. This was quite a lengthy report. The gist of it has already been published in HARDWOOD RECORD. The club voted to accept the report and to extend to Mr. McClure a special vote of thanks for the very thorough manner in which he had handled this subject.

The entertainment committee reported that the Arkansas Lumbermen's Club had postponed the trip over the state and that, because of this fact, it would be impossible for the Lumbermen's Club of Memphis to carry out its plans for the entertainment of that body. The trip will not be made until Oct. 20.

The delegates from Memphis to the annual of the National Hardwood Lumber Association at Chicago will, according to action taken at this meeting, leave Memphis at 4:20 on the evening of June 4 over the Illinois Central. It is proposed to have as many delegates as possible from points outside of Memphis join with the local delegation on this trip. The entertainment committee will secure the names of those who will attend and will also make the necessary reservations. The party will reach Chicago early in the morning of the opening day.

The chairman of the statistics committee reported that the figures covering the volume of business done at Memphis during 1912 would be ready for distribution by the time the National Hardwood Lumber Association meets.

A communication from the St. Louis Lumbermen's Club, apprising the Lumbermen's Club of Memphis of its action in adopting resolutions favoring a continuance of the commerce court and seriously protesting against the abolition thereof, was referred to the law and insurance committee.

All of the delegates from Memphis to the annual of the National Lumber Manufacturers' Association have been invited to attend a reception at the home of R. A. Long, Kansas City, on the evening of June 3. This invitation came through Secretary Rhodes of this association and includes the wives and friends of the delegates as well as themselves.

The subject of more commodious quarters for the Lumbermen's Club in the building of the Business Men's Club came up for discussion. It was referred to the executive board which was empowered to take such action as it saw fit.

Delegates Michigan Hardwood Association to National Manufacturers' Convention

President F. L. Richardson of the Michigan Hardwood Manufacturers' Association has announced through the office of the secretary, the names of the delegates and alternates who will represent that association at the forthcoming meeting of the National Lumber Manufacturers' Association to be held at the Hotel Baltimore, Kansas City, Mo., June 3 and 4. Among the delegates and alternates are many men prominent among association and lumber affairs in the state of Michigan.

Bulletin of the National Lumber Manufacturers' Association

The latest bulletin or report addressed to the board of governors of the National Lumber Manufacturers' Association was recently issued. The book reviews the fiber box case hearing at Chicago; recent track scales and weighing hearing at Washington, D. C.; tells briefly of recent meetings of affiliated associations; gives the status of the lumber tariff discussion to date, and notice of the coming annual meeting and meetings of the board of governors.

Coming Meeting Veneer and Panel Manufacturers

The National Veneer and Panel Manufacturers' Association will hold its regular annual meeting at the Auditorium hotel, Chicago, on Tuesday and Wednesday, June 10 and 11. The regular session will be preceded by meetings of the various affiliated clubs. Secretary Howard S. Young announces that there will be presented questions and addresses of considerable importance to the veneer and panel manufacturing trade.

National Wholesalers File Petition on Lumber Rates on Southern Railway

The National Wholesale Lumber Dealers' Association, through its transportation bureau, has filed a petition with the Interstate Commerce Commission requesting the suspension pending investigation of the proposed advances on the rates on lumber and forest products at stations on the Southern Railway in western North Carolina territory. These tariffs which have been published by the Southern Railway to become effective May 30 contain a large number of increases running from one-half cent to six and a half cents per hundred pounds, the average increase being about two cents.

The rates from the Asheville section to Norfolk, Va., on local and export delivery are advanced four and a half cents per hundred pounds with corresponding advances to other Virginia cities. Lumber shippers are very much exercised over these proposed advances, which if permitted will seriously affect every export and domestic interest.

The National Wholesale Lumber Dealers' Association has taken up the cause of the shippers and hopes to suspend these proposed advances until such time as the shippers can be heard and a careful examination made.

The petition argues that if the advances published in the tariff supplement, running as stated from one-half to six and a half cents a hundred pounds, are permitted to go into effect they will increase present rates from five to thirty-five per cent. As an example is given the rates on the Asheville division from Buena Vista, N. C., to Saluda, N. C. Here, with the exception of rates to Alexandria, Va., the advance is one and a half cents per hundred pounds, and the rates to Norfolk and other Virginia cities as published in Supplement 13, ICCA-4800 show advances of four and a half cents per hundred pounds. This represents an increase of $2 a thousand feet on hardwood lumber for distances averaging from 450 to 483 miles. It means further an increase of twenty cents per ton per mile. The petition argues that such an increase is exorbitant for either local or export delivery. It states further that it is in a great many cases more than the shipper's margin of profit, especially on the lower grades of hardwood.

A further argument is shown in connection with Supplement 6 to tariff ICCA-5360, which takes Asheville, N. C., as a basis, and the advances run from one-half to six and a half cents per hundred pounds, the average being two cents. This represents an increase for stations in group 7 of from thirty-one to thirty-seven and one-half cents per hundred pounds on hemlock and spruce, and thirty-two to thirty-seven and one-half cents on other kinds of wood, which means an increase on freight charges of approximately $1.75 a thousand on hemlock and spruce, and $2.50 a thousand on hardwood.

The petition further maintains that the proposed advances are discriminatory against lumber shippers, and states there is a large amount of low-grade lumber shipped from this territory and sold at a low margin of profit. This will be entirely wiped out if the advances become effective.

It is pointed out that any exorbitant increase in freight charges which prohibits shippers from manufacturing and marketing low-grade lumber would shortly act upon the carriers and decrease tonnage and effect a consequent loss of revenue. Furthermore, it is pointed out that many mills have already made contracts based on present rates and should the new tariffs go into effect these contracts would result in an actual loss. It is stated that business has already been retarded on account of the proposed advanced rates as manufacturers in that section of North Carolina cannot figure on a competitive basis with manufacturers in other territories.

Biltmore Doings for April

The Biltmore Forest School has just published its record of work during the month of April. The school assembled the first of the month at Tupper Lake in the heart of the Adirondacks, where it remained two weeks studying questions of logging, regeneration, and protection of state and private forests. A great deal of this work is going on in that section of the country with a view of forest conservation. The work has been favored by unusually good second growth regeneration on cutover lands. The students visited state nurseries and plantations as well as fish hatcheries maintained by the state forestry service. They also spent a day with pulp, fiber and paper mills of the International Paper Company and later studied the operations of the Brooklyn Cooperage Company. On Apr. 14 the students arrived at Washington, D. C., where they spent a full week. They were favored with lectures by various men prominent in the Forest Service, and were shown all there is to be shown in connection with the forestry work and the allied studies at Washington.

On Apr. 21 the students arrived at Norfolk, Va., where they were the guests of the J. L. Roper Lumber Company. After going over the operations of the Roper company at its juniper mill at Gilmerton, they had a chance to see the sights of the famous harbor of Norfolk.

On Apr. 22, the school arrived at Newbern, N. C. From there the students went into the woods operations of the J. L. Roper Lumber Company, which concern owns 800,000 acres of coastal pine land. They went through the series of modern mills operated by that concern and also made a close study of second growth and conservative forestry methods in vogue in the woods. The flora of North Carolina, which, next to California, is the richest in the Union, was studied closely. As the windup to the month's work, the students visited the mill of the Roper company at Newbern. They left that place the last day of April, en route for Biltmore, N. C.

Inspection Statement of National Hardwood Association

The statement of inspection for April of the National Hardwood Lumber Association states that the total amount of hardwood inspected under the bonded certificate during that month was 12,377,464 feet, an increase over April, 1912, of 1,163,804 feet. This volume of inspection was accomplished with expenses $531.33 in excess of the amount earned. This was due largely to flood conditions at many points, which rendered it impossible for inspectors situated in those districts to do anything.

Since the letter of April 15, eighteen new applications for membership have been received by the association, which brings the total number of new members admitted during the year to 144.

The bulletin contains the notation that N. W. Rice, inspector for the Pittsburgh district, has resigned and been succeeded by I. O. Burdette, whose address is 944 Western avenue, North Side, Pittsburgh. All applications for inspection in that district should be addressed to him.

A copy of the recommendations of the inspection rules committee for changes in the inspection rules has been mailed every member, but those desiring additional copies can get them on application to the National Hardwood Lumber Association office at Chicago.

New Committees of the National Wholesale Lumber Dealers' Association

The National Wholesale Lumber Dealers' Association has announced through its office at New York the following committees for 1913-14:

EXECUTIVE COMMITTEE: N. H. Walcott, Providence, R. I.; G. C. Edwards, Ottawa, Ont.; W. W. Knight, Indianapolis, Ind.; F. E. Parker, Saginaw, Mich.; B. F. Betts, Philadelphia, Pa.

BOARD OF MANAGERS OF BUREAU OF INFORMATION: A. L. Stone, chairman, Cleveland, O.; C. I. Millard, Norfolk, Va.; Alexander Willson, Pittsburgh, Pa.; M. E. Preisch, North Tonawanda, N. Y.; W. A. Bennett, Cincinnati, O.; C. F. Treadway, New Haven, Conn.

HARDWOOD INSPECTION COMMITTEE: Hugh McLean, chairman, Buffalo, N. Y.; J. L. Alcock, Baltimore, Md.; R. M. Carrier, Sardis, Miss.; R. W. Scofield, Philadelphia, Pa.; T. A. Washington, Nashville, Tenn.; G. I. Jones, Boston, Mass.; J. W. McClure, Memphis, Tenn.

SPECIAL COMMITTEE ON SINGLE STANDARD UNIVERSAL HARDWOOD INSPECTION: Lewis Dill, chairman, Baltimore, Md.; O. O. Agler, Chicago, Ill.; E. V. Babcock, Pittsburgh, Pa.; R. M. Carrier, Sardis, Miss.; R. H. Vansant, Ashland, Ky.

COMMITTEE ON TERMS OF SALE AND TRADE ETHICS: F. S. Underhill, chairman, Philadelphia, Pa.; W. G. Underwood, Hertford, N. C.; Ralph May, Memphis, Tenn.; H. R. Domiway, New York, N. Y.; Alexander Willson, Pittsburgh, Pa.; M. B. Nelson, Kansas City, Mo.; S. M. Bloss, Garyville, La.; Charles Hill, New York, N. Y.

Other committees reported are fire insurance, railroad and transportation, lake insurance, coastwise insurance, arbitration, forestry, audit and finance, legislation, membership and trade relations.

Lumbermen's Underwriting Alliance Bulletin

Bulletin No. 62 of the Lumbermen's Underwriting Alliance, Kansas City, Mo., has just been issued. The bulletin contains the usual list of fires reported since the preceding list. The bulletin further analyzes the causes of numerous small fires which have been reported. Loss of pressure and nearness of valves and hydrants to mills again enter into the causes contributing to the spread of incipient blazes. In one plant lack of efficient checking on watchman's rounds probably had a great deal to do with the origin of the fire. In another fire, lack of steam available for pumps used for creating pressure had a great deal to do with the destruction caused, which illustrates the importance of testing the fire pump daily and knowing at the close of each day that steam is being provided from the proper source. The bulletin shows how various other causes lead up to blazes at different points.

Death of S. P. C. Hostler

One of the widest known hardwood commission lumber salesmen in this market, S. P. C. Hostler, died suddenly at his residence, 2104 Giddings avenue, Ravenswood, Chicago, on May 13. Mr. Hostler had been in the commission lumber business in this market for about twenty-five years, representing a score or more of the leading manufacturers for whom he developed a very handsome business, and no inconsiderable profit to himself.

Mr. Hostler was highly regarded in the trade and his passing will be a distinct grief to his many friends. He leaves a family consisting of his wife, and two daughters, both of whom are married.

Mr. Hostler was a remarkably well-known figure in the local hardwood lumber trade and was deservedly popular. Familiarly he was known as "Old Hoss." He was an energetic worker and had an enviable reputation among both manufacturers and wholesale consumers. He was born in Seneca county, Ohio, August 29, 1855, hence was fifty-seven years old at his death.

Moore & McFerrin Lumber Company Loses Warehouse by Fire

A large warehouse of the Moore & McFerrin Lumber Company of Memphis, Tenn., was destroyed by fire on May 9. The conflagration was caused by a spark from a locomotive. It had gained such headway before the firemen arrived that they were forced to confine their attention to saving surrounding buildings and stock.

A New Virginia Operation

The Lyndhurst Lumber Corporation is the style of a new concern now engaged in the construction of nine miles of railroad from the Norfolk & Western at Lipscomb, Va., to Pierce, Va., to open up 10,000 acres of original stand of hardwood timber, much of which is white oak. Five miles of the road, which will be standard gauge, have already been graded. It will terminate in the Kennedy and Mount Tory timber tracts owned by this corporation. This concern is backed by Harrison Ball of Mahanoy City, Pa.

Billmeyer Lumber Company Acquires Timber

The Billmeyer Lumber Company of Cumberland, Md., recently purchased an extensive tract of high-grade stumpage, running well to white oak, near Newburg, W. Va. This company has been recognized for years as a leading manufacturer of white oak ship plank, and dock and car lumber and timber. The tract will be opened up immediately.

On May 15 the offices of the Billmeyer Lumber Company were moved to the First National Bank building, corner of Baltimore and George streets.

Hardwood Sales at Liverpool for April

Report from a London house states that at the April hardwood sales in the Liverpool market, there was a tremendous demand for stocks, and considerable advances were noticed in many items. However, as the stocks were not as good as usual, advances do not show to the full extent in published averages. The report states that there is a general feeling that prices are not yet as high as they will go, particularly as numerous complaints are being circulated by buyers that they are unable to fill their orders. This, in addition to reports of mahogany shortages in African, Mexican and Honduras woods, makes the situation very favorable from a price standpoint. The report includes the statement that mahogany is unquestionably a paying investment even at present apparently high prices.

Death of John L. Sine

On Wednesday, May 14, John L. Sine of the Greble-Sine Lumber Company, Memphis and Chicago, died at the Michael Reese hospital, Chicago, after a prolonged attack of typhoid fever. Mr. Sine was only twenty-nine years old at the time of his death. He contracted typhoid while in the South as the floods were coming on and, while his case was at first light, it proved very obstinate and subsequently developed a very critical condition. Mr. Sine was in a semi-conscious condition during the last week or two of his illness.

The deceased started in the lumber business eight years ago. He was born at Belleville, Ontario. His first lumber connection was with the Menz Lumber Company, Minneapolis, which concern handled wholesale coast products. Mr. Sine stayed with it for several years and then went to Clarks, La., with the Louisiana Central Lumber Company, a yellow pine concern connected with the Missouri Land and Lumber Exchange of Kansas City. He served for a year as cashier with this concern and then went into the mill, where he remained a year. Severing this connection, he went with the Gilchrist-Fordney Lumber Company at Laurel, Miss. This also was a yellow pine concern. Mr. Sine traveled for it for a while and later joined the forces of the Three States Lumber Company of Memphis, an allied concern. He managed the Chicago office of this company and spent a great deal of his time on the road, being in its employ for three years. Last August he, with William Greble, formerly sales manager of the Three States Lumber Company, formed the Greble Sine Lumber Company, with offices in Memphis, Tenn., and Chicago. Mr. Sine was at the Chicago office.

The deceased was not married. He had four brothers, all of whom are directly connected with the lumber business, handling Pacific coast stock. His brother, A. J. Sine, Chicago representative of the Pacific Lumber Agency and the Potlatch Lumber Company, was located in the same office with him.

Baltimore Hub Plant Burns

The plant of the Baltimore Hub Wheel Company, on the Baltimore & Ohio railroad, just east of Harford avenue, Baltimore, was completely destroyed by fire on May 11, nothing but ruins being left of the two-story brick buildings. It is thought that the blaze was due to sparks from a passing locomotive setting fire to the grass along the track, from which the flames spread to the building. Owing to the difficulty of getting water nearby, the fire department could make no headway in fighting the flames. The second story of the building was occupied by the Cosmopolitan Broom Company, which also lost everything. The damage is estimated at more than $100,000, the greater part of the loss falling on the hub company. It is believed that the direct loss is covered by insurance.

Proposed Advance of Rates in the East

Fifty-two railroads in the East have filed briefs asking for increases in freight rates between eastern points. The increases asked approximate five per cent. The railroads are represented officially by Daniel Willard, president of the Baltimore & Ohio railroad and chairman of the committee of the railroads in charge of the matter, which meets with the transportation committee of the New York Merchants' Association, which is taking up the matter of the increase on behalf of the shippers. Every effort is being made by the latter organization to protect the shippers' interests. The first meeting of the transportation committee resulted in a decision to request Mr. Willard to give certain information as to the basis on which the railroads will solicit the desired increase. It is expected that the Interstate Commerce Commission will grant the increase and will then name a date on which to hear the protests of shippers. It is anticipated that the matter will be finally settled by early fall.

In a statement bearing on the case, President Willard says that the increase is a matter of necessity because of the immense amount spent by the various roads interested for improvements of various kinds, in addition to increases in wages and taxes, awards to employes, and other factors increasing operating expenses.

Purchases Wisconsin Timber and Operations

It was announced in a recent issue of HARDWOOD RECORD that the Edward Hines Lumber Company of Chicago had purchased the timber and plant of the Atwood Lumber and Manufacturing Company at Park Falls, Wis. This, it seems, is only one factor in a deal involving an expenditure of $2,000,000 and in which 600,000,000 feet of standing hemlock and hardwood timber changed hands. This deal has been consummated by the Edward Hines Lumber Company and transfers to it the timber of the Mississippi Log and Boom Company, the Chippewa Logging Company, The Soo Line, Weyerhaeuser & Rutledge holdings in Price, Iron and Ashland counties, Wisconsin, in addition to the Park Falls operations. The deal was closed after a three days' conference between the officials of the Edward Hines Lumber Company and the officials of the parties on the other side. This is one of the largest deals that has ever been transacted in Wisconsin lumber circles. It adds an enormous output to the already extensive operations of the Edward Hines Lumber Company, the Park Falls mill alone having a capacity of 50,000,000 feet of lumber annually.

The Spirit Which Minimizes Forest Fires Abroad

A communication from Dr. C. A. Schenck, head of the Biltmore Forest School, which has just returned from its winter quarters at Darmstadt, Germany, contains an interesting clipping from a German publication. The story, while humorous, is of particular interest in that it illustrates the sentiment which prevails among European countries in connection with forest growth, and illustrates further the real reason why the loss from forest fires abroad is absolutely minimized.

The clipping says:

"Rushing with the village fire brigade against the full moon to stop it from burning,—that is the achievement of the inhabitants of Nussloch, a small hamlet near Heidelberg. When the full moon rose behind the wooded hills, a farmer thought the woods to be afire, and ran post-haste to the village chief with the fire report, whereupon his honor, the Burgomaster, gave order for all church and all schoolbells to be rung and for the policemen to alarm the citizens. A few minutes later, the fire brigade, exhausted from sheer excitement before the battle began, with ladder and

hose and water pump were seen rushing to the woods, where they learned after a little while that the full moon had fooled them.

"Apparently the woods are safe where such is the spirit of the farmers living near!"

Heavy Sentences for Officers of Philadelphia Company

Judge Witmer of the United States District Court at Philadelphia recently pronounced sentence on the convicted officials of the International Lumber and Development Company of Philadelphia, who were found guilty of fraudulent use of the mails and other offenses as given in detail in previous issues of HARDWOOD RECORD. The motion of the attorneys for the defense to secure new trial was refused by the judge.

John R. Markley and Isaiah B. Miller of Chicago were each fined $10,000 and sentenced to fifteen months imprisonment. William H. Armstrong, Jr., and Charles R. McMahon of Philadelphia were each given a fine of $2,000 and a sentence of two years in prison. Colonel A. G. Stewart of Mason City, Ia., was fined $1,000 and sentenced to a year's imprisonment.

The disastrous results of the operations of this company, both for the investors and the principals of the company, should serve as a striking warning to anyone contemplating investing in lumber or other enterprises of which they have not accurate and thoroughly reliable information.

New Shingle Specifications

The Massachusetts legislature has passed a new law governing the manner in which shingles must be put up for sale in Massachusetts. The bill which has been signed by the governor reads as follows:

Section 1—In this commonwealth all random width wooden shingles shall be sold in bunches or bundles measuring not less than twenty inches in width and containing not less than twenty-three courses or layers on one end and not less than twenty-four courses or layers on the other end. The shingles in each bunch or bundle when laid five inches exposed surface to weather shall cover twenty-five square feet in area. Four such bundles of shingles shall constitute a unit of measure termed a thousand.

Section 2—All violations of this act shall be punishable by a fine of not less than five nor more than five hundred dollars for each offense.

Section 3—All acts or parts inconsistent herewith are hereby repealed.

Section 4—This act shall take effect ninety days after its passage.

Crossties Purchased in 1911

The accompanying table shows the number of crossties purchased by the steam and electric roads of the United States in 1911 and for four preceding years, and the species of woods with the number of ties of each kind:

CROSSTIES PURCHASED, BY KINDS OF WOOD, 1907 TO 1911

Kind of wood	1911	1910	1909	1908	1907
All kinds..	135,053,000	148,231,000	123,751,000	112,466,000	153,703,000
Oak	59,508,000	68,382,000	57,132,000	48,110,000	61,757,000
Southern pine	24,265,000	26,264,000	21,385,000	21,530,000	34,215,000
Douglas fir..	11,253,000	11,629,000	9,067,000	7,988,000	14,525,000
Cedar	8,015,000	7,305,000	6,777,000	8,172,000	8,954,000
Chestnut ...	7,542,000	7,760,000	6,629,000	8,074,000	7,851,000
Cypress	5,857,000	5,396,000	4,589,000	3,457,000	6,780,000
Tamarack ..	4,138,000	5,163,000	3,311,000	4,025,000	4,562,000
Hemlock ...	3,686,000	3,468,000	2,642,000	3,120,000	2,367,000
Western pine	2,696,000	4,612,000	6,797,000	3,093,000	5,019,000
Redwood ...	1,820,000	2,165,000	2,088,000	871,000	2,032,000
Gum	1,293,000	1,621,000	378,000	262,000	15,000
Maple	1,189,000	773,000	158,000	151,000	.....
Beech	1,109,000	798,000	195,000	192,000	52,000
All other...	2,682,000	2,895,000	2,603,000	3,421,000	5,574,000

The steam roads purchased 126,155,000 of the ties listed, and the electric roads 8,898,000. Of the total ties purchased, 31,141,000 were given preservative treatment to hinder decay. There were 112 treating plants in the United States, and during the year they used over 73,000,000 gallons of creosote oil, seventy per cent of which was imported from England and Germany. Creosote treatment was given 17,636,735 ties, zinc chloride to 8,670,929, creosote and zinc chloride to 3,015,075, and miscellaneous treatment to 1,818,492 others.

An Outline for a Field Study of a Lumber Operation

The above is the title of a pamphlet, prepared by R. C. Bryant, professor of lumbering of the Yale Forest School, that has been prepared for the use of students in the senior class of that institution, and for others who may wish a guide to aid them in the preparation of a field report on a lumber operation. It covers the general logging problems of all forest regions, in order that it may be of service to those who desire to investigate operations in any section. Consequently, for local conditions it will be necessary to eliminate certain subjects which do not pertain to the particular operation being studied.

The outline has been made comprehensively and covers any subject coming under woods or millwork in any lumber operation. Among the subjects included are: The Region; Ownership and Management; The Forest; The Logging Operation; Lumber Manufacture; Lumber Shipment and Transportation; Sale of Lumber; Lath Manufacture; Shingle Manufacture; Naval Stores Industry and Harvesting Tanbark.

Under these subjects are many subheads. The whole is designed as suggested as merely an outline showing the different questions which must be investigated in order to get at a comprehensive report of any operation.

W. P. Brown & Sons Lumber Company Increased Operations

The W. P. Brown & Sons Lumber Company of Louisville, Ky., has purchased two seven-foot band mills located at Fayette, Ala., which have a combined daily output of 70,000 feet. The mills are already in operation and are in charge of W. D. Frazier, who has been operating for himself in the vicinity of Fayette for several years. The mills will be supplied with logs by M. and L. Baskette from a tract of timber owned by these men in the mills' vicinity. This timber is of sufficient extent to supply the mills for several years and runs about equally to oak and gum.

Maxwell Brothers Incorporate for Box Manufacture

Two sons of Henry B. Maxwell of Chicago, well known in wooden box circles, namely, August K. and Harry W. Maxwell, have just incorporated as Maxwell Brothers for the purpose of manufacturing packing boxes. Definite arrangements have not been completed as to the location and arrangement of the plant.

E. Sondheimer Company Sells Cairo Yard

The E. Sondheimer Company of Memphis, Tenn., announces that it has decided to dispose of its yard at Cairo, Ill. C. C. Schafer of South Bend, Ind., has taken over the yard, foundations, switch tracks, etc. The Sondheimer yard is located immediately adjacent to C. C. Schafer's Cairo yard and thus the acquisition of the new space is of considerable value to him. It is also planned by the Sondheimer company that it will open a branch house at Detroit, Mich., with Herman Katz in charge.

A Few Stumps

Cadillac, Mich., has become justly famous for its practical application of the more scientific phases of the conservation of forest resources through complete utilization. Here are found not only sawmills of the most modern type, but veneer plants, furniture factories, dimension, handle and last plants, flooring plants and in fact plants for the manufacture of almost every conceivable article that can be made from the products and by-products of Michigan forests. Not the least important of these is a plant for the extraction of turpentine from Norway pine stumps. This plant has been in active operation for several years and is now reported to be on an excellent financial basis. It manufactures its turpentine exclusively from Norway pine stumps brought in from the surrounding country by farmers and others clearing land. Just now it has the biggest pile of stumps it has ever accumulated. The accompanying illustration gives some idea of the size of this stump pile, but really does not do it justice. The pile shown in the photograph is between thirty and forty feet high and covers a large portion of the company's ground. It contains in all about thirty-five hundred cords. The Cadillac Turpentine Company had its plant shut down for alterations for some time, but began operations again on May 1.



3,500 CORDS NORWAY PINE STUMPS FOR TURPENTINE PRODUCTION, CADILLLAC TURPENTINE COMPANY, CADILLAC, MICH.

Emil Guenther Buys Timber

The Guenther Lumber Company of Philadelphia, wholesaler of hardwoods, cypress and white pine, announces that its president, Emil Guenther of that city, has just returned from an extended trip to North Carolina, where he acquired a tract of 4,000 acres running principally to gum. The operations will begin immediately.

Cordwood and Real Wood

The regulation cord of wood is a pile four feet wide, four feet high, and eight feet long, the volume of which is 128 cubic feet. This volume consists of wood and the air spaces between the sticks. There are never 128 cubic feet of real wood in a cord made up of pieces, because more or less space exists between them. The quantity of air in a cord of wood depends upon the size and shape of the sticks. Their lengths as well as their diameters must be taken into account. It is found by actual measurement that a rick two feet wide, four feet high, and sixteen feet long contains a little more wood than a rick four feet wide, four feet high and eight feet long, though the two ricks are of equal total volume. There is still less wood in a rick eight feet wide, four feet high, and four feet long. In other words, the longer the sticks, the less real wood there is in a cord. That is because a long stick is apt to be more

irregular in size and shape than a short one, permitting more vacant space between the pieces.

Some cordwood cutters are experts in building the ricks in a way to increase the air spaces. The trick is worked by laying crooked sticks among the straight ones to hold them as far apart as possible. The quantity of real wood in a cord varies greatly. It has been figured out that if the rick is of four-foot sticks it contains from sixty-four to eighty-nine cubic feet of real wood, depending on the size and shape of the pieces; if the sticks are eight feet long, the rick contains from fifty-nine to eighty-four cubic feet; if twelve-foot sticks are used, there are from fifty-four to seventy-eight cubic feet in a cord. If the sticks are only two feet long a cord contains from sixty-five to ninety-one cubic feet.

It is thus apparent that the interests of the cutter and the buyer of cordwood conflict. If the cutter reduces the wood to short lengths, he not only expends more work on it, but it takes more wood to make a cord. He may be compensated to some extent if he splits the wood in small pieces, for a cord of large sticks makes considerably more than a cord if split small; or, a cord of small round poles contains less real wood than a cord of the same shaped sticks of greater diameter. The old saying that there are tricks in all trades holds as true of cordwood cutting as of anything else.

Tanbark buyers often purchase their commodity by weight, though the bark is ricked in cords; but even then the buyer may be cheated because he cannot always determine how much of the last shower of rain is still absorbed in the bark, or how many buckets of water the teamster threw on his load of bark as he forded the creek on his way to the scales to have the bark weighed preparatory to selling it.

Timberland Purchase

The H. P. Wyman Lumber Company, a recently organized concern at Bristol, Va.-Tenn., a short time ago purchased a considerable tract of hardwood timber near Bigstone Gap, Va. It is planned to erect mills immediately and to start operations as soon as they are completed. This company was organized by H. P. Wyman of the Bristol Door & Lumber Company. It is capitalized at $24,000.

Important If True

It often happens that not only the lay press, but individuals unfamiliar with lumber affairs, in discussing them fall into grievous errors, and statements are often promulgated that are highly ridiculous.

In the last few days a large timber bond house of Chicago has issued magazine advertisements covering a bond issue that is selling on a western lumber enterprise. In this announcement is involved the statement that the concern, in addition to its lumber output, produces five hundred thousand "feet" of shingles, daily. The obvious intention of the announcement is that five hundred thousand pieces of shingles are daily manufactured.

The Bloomington, Ill., Pantograph of March 14 carries an article on veneer cutting, which while not intended as humorous might so be considered, as every veneer manufacturer and consumer will recognize the ridiculous, not to mention the untruthful, character of the statements involved.

The article is quoted in full:

In no form is modern machinery more wonderful than in that employed to cut huge blocks of most valuable woods in thin sections or "slices," to be used by cabinet makers and others as veneers. Deep cutting blades, almost as thin throughout as paper—in order to avoid waste—cut as many as thirty beautiful sections at one stroke, the hard wood, often seasoned for years, being severed just as though it were cheese, and the sections being, if necessary, so thin that they resemble tissue paper.

In some cases the wood has been buried in mud of a peculiar kind for over twenty years and in others it represents the whole seasoned stock of the particular wood existing either here or abroad, for "corners" in valuable woods are quite common. A certain rare wood came into fashion a year or two back and one astute speculator bought up the whole available seasoned stock of the world. Cabinet makers who had entered into contracts in regard to it had to pay famine prices and were compelled to buy twenty times more than they actually required or have none at all.

Crown Motor Car Company Organized at Louisville

The Crown Motor Car Company is the style of a new incorporation which will start business at Louisville for the manufacture of moderate-priced automobiles. The company has an authorized capital stock of $500,000. It is planned to manufacture a cheap two-passenger runabout which will retail at $350.

Eucalyptus Growers Organize

At a meeting held in Los Angeles, Cal., on April 22, representative eucalyptus growers, dealers and manufacturers of that city organized into the Eucalyptus Hardwood Association of California. The object of the association, as stated in the constitution, is to foster and encourage the growing of eucalyptus timber, to stimulate the manufacture and use of eucalyptus products and by-products, to furnish authentic information regarding eucalyptus and to protect both its members and the public from dishonest dealers in eucalyptus investments. As to the membership, the constitution provides that any reputable person, firm or corporation owning land planted or about to be planted in eucalyptus, or engaged in the manufacture, buying or selling end of the eucalyptus business, is eligible.

Those present elected as officers: L. M. Pratt, president; F. S. Churchhill, first vice-president; C. F. Cook, second vice-president; C. A. McWilliams, secretary; Theodore B. Comstock, treasurer.

A Half of New York State Better Adapted to Forestry Than to Agriculture

The State College of Forestry at Syracuse has been conducting in co-operation with the United States Forest Service a careful study of the wood-working industries of New York. In connection with the study of the woods used in our industries, their sources and methods of more complete utilization, the experts of the college have been reporting on forest conditions in counties throughout the state.

Reports sent to the State College of Forestry by its field men show that the figures given out by the last census of New York, while fairly correct, are not commonly understood or appreciated. The census reports show that out of the 34 millions of acres in the state but 22 millions are enclosed within farms. This leaves an area of 12 million acres partly in forests and partly as idle land. This vast area is equal to all of Rhode Island, Connecticut and Massachusetts and forty miles north in Vermont and New Hampshire or all of New York north of the New York Central railroad.

The census reports show further that of the 22 millions of acres enclosed within farms but 15 million are actually in agricultural crops. This means that there is an area the size of Massachusetts enclosed within the farms of the state operated without profit. The farmers of the state are losing a very large sum of money by not getting a reasonable income from this great area. Lands in Germany and Austria not as well adapted to the growth of forests as the idle lands within our farms are producing as high as $2.50 to $5 per acre per year, or from two and one-half to three per cent compound interest. This same income can be gotten from idle lands in New York.

New York is a great agricultural state; it promises to be an even greater forest state because conditions are very favorable to the growth of forests and there are few states in the Union with better market facilities. It seems both unreasonable and unbusiness-like to allow from 12 to 16 millions of dollars to be sent out of the state each year for wood to be used in our industries when our idle lands could be made to produce easily and annually as high as $2 to $3 per acre per year under proper forest management.

"Mahogany" from the Fiji Islands

A recent shipment was received at Portland, Ore., of 130,000 feet of alleged South Sea Island mahogany from the Fijis. The timber was brought in on a schooner which completed the passage in sixty-four days. The load was made up of 579 so-called mahogany logs and in addition 612 pieces of oak timber. It is the first cargo of this sort ever landed at Portland, and is consigned to the Emerson Hardwood Company for conversion into cabinet work.

Some Valuable Suggestions on Bond Issues

F. A. Brewer & Co., bankers, Commercial National Bank building, Chicago, have just issued an extraordinary pamphlet describing the method employed by this concern in financing lumber and timber companies. The pamphlet commands attention by virtue of its concise analysis of the factors governing in bond issues. It maintains that successful operation must have a proportionate balance between the various factors entering into the entire proposition. The pamphlet states that the ratio between the cost of mill and other manufacturing facilities on the one hand and timber on the other varies from one to five to one to twenty. The pamphlet further maintains that if an adequate supply of timber is not secured at the start of an operation, the way to a successful conclusion has not been paved. After these salient statements, the pamphlet goes on to describe the Brewer method of financing timber operations, touching on the distribution of financial load, the payment of timber as utilized, the method for securing bond issues, which subject is divided into the subheads "loan," "security," "fire risk," "logging," "water rights," "transportation," "market," "capital stock," "resources and liabilities," "officers," and "references."

Suggestion for Tariff Regulators

The ability of American forest workers to compete with those of some eastern countries may well be questioned in view of a recent report by U. S. Consul John H. Snodgrass, at Moscow, Russia, that the "seg" laborers in that country work thirteen or fourteen hours a day for three and one-half cents. Seg is a product made from the bark of the basswood tree and is used for cordage. The peasants gather the bark in season, and prepare it for market in winter when there is little outdoor work to be done. Fortunately, the manufactured product does not come in direct competition with anything manufactured in the United States; but the fact that forest products are put on the market by men who work for three and one-half cents a day contains a suggestion worthy of consideration by those who are willing to break down tariff walls without knowing exactly what lies on the other side.

Reorganization of Bayou Land and Lumber Company

The Bayou Land and Lumber Company, with offices in the Neave building, Cincinnati, O., and mills at Mississippi and Louisiana points, has just perfected its rearrangement made necessary by the death of its president, Clifford S. Walker, which occurred several months ago. The concern will be under the same management as before, with an increased capital stock from $25,000 to $50,000, all paid in. Fred K. Conn is the new president, George W. Hand, vice-president, and F. E. Linz, secretary and treasurer. All of these gentlemen have been active in the conduction of

the business since its start about five years ago. The company has been prosperous, and with its increased capital and facilities it will reach out further than ever before. The three men in control are hustling young men, which reflects great credit on the judgment of the late Clifford S. Walker who organized the business and put these men in active charge from the start.

Wisconsin Lumbermen Object to More Frequent Pay Days

At the hearing held May 20, before the senate committee on education and public welfare, at Madison, Wis., on bill No. 1,112 A, which provides for more frequent pay days for workmen, employers in practically every line of trade were present to voice their opposition to such a measure. The measure was presented by the committee on labor as a substitute to the Minkley weekly pay day measure. The lumber interests were strongly represented at the hearing, as were the railroads. The lumbermen objected to the provision of the bill principally because it would compel them to carry the cash into lumber camps far removed from cities, increasing not only the cost of paying off the men but increasing the danger from hold-ups and the weather. Among those present were W. P. McCullough, secretary-treasurer of the Brooks & Ross Lumber Company, Schofield; W. A. Holt of the Holt Lumber Company, Oconto; representatives of the B. Heinemann Lumber Company, Wausau; the Tigerton Lumber Company, Tigerton; R. S. Kellogg, secretary of the Northern Hemlock and Hardwood Manufacturers' Association. Treasurer Jones of the Chicago & Northwestern, Superintendent P. C. Eldridge and Paymaster Flack of the Chicago, Milwaukee & St. Paul, Superintendent Potter of the Soo line, C. S. Thompson, representing The Bucyrus Company and A. F. Gallun & Sons of Milwaukee, and R. D. Miller representing the Brotherhood of Railway Conductors, also appeared against the bill. Mr. Jones said that his company's payroll included 60,000 men and amounted to $36,000,000 a year. At present it costs twenty cents per man per month to get the money to the men promptly on pay day, and is a big task. Assemblyman Minkley of Milwaukee, and A. S. Merz, representing the Brotherhood of Locomotive Firemen, appeared for the bill, arguing that more pay days make the workmen more provident and independent and charging larger companies with objecting to more frequent distribution on account of using the money for a longer time themselves. If it were better for the men or they desired it, Mr. Jones said that his company would change to two pay days a month, regardless of cost.

Hardwood for Tie Plates

There is published in the May 10 issue of the Railway and Engineering Review of Chicago a detailed description of the construction, application and purpose of a wooden tie plate which is being experimented with, apparently successfully, in European countries, most notably in France. The article contends that, while railway engineers in this country have perfected to a marked degree the various appliances entering into modern railway construction, they do not place anywhere near the stress upon accurate installation of these appliances that European engineers do. The tie-plate in question is an instance of this efficiency. It is designed for the purpose of distributing the load uniformly over the surface of the tie and, because of the manner of its construction, providing a cushion which necessarily makes riding much more comfortable. In addition, it strengthens the cross section of the tie and if the tie is properly impregnated with preservative material, it eliminates the waste from mechanical wear to a considerable degree, as only the plate and not the whole tie is replaced after wearing.

A cut of the plate is shown herewith. It will be seen that it is really only a hardwood disc and, as now planned, it is intended to manufacture these discs or pads from oak, beech and hornbeam. The alignment of the pads is very precise, the hole for the screw spikes being bored with great accuracy and care. The seat of the pad is concave and it is filled with a hot tarry mass, into which the pad is twisted, which mass provides the cushion and also absolutely prevents decay in the joint.

Lumber and Forestry Exhibit at Philadelphia

The first public exhibition of the Pennsylvania Forestry Association was held in Horticultural hall, Philadelphia, May 20 to 24. This association was founded in June, 1886, its purpose being to disseminate information in regard to the necessity and methods of forest culture and preservation, and to secure the enactment and enforcement of proper forest protective laws, both state and national. The officers are: President, John Birkinbine; vice-presidents, Robert S. Conklin, William S. Harvey, James C. Haydon, Albert Lewis and Samuel L. Smedley; general secretary, Dr. Joseph T. Rothrock; recording secretary, F. L. Bitler; treasurer, Charles E. Pancoast.

The exhibition was free to the public, and the attendance both in the afternoon and evening was large. Much interest was manifested by the visitors in the displays, which in many cases were elaborate, covering every phase of forestry from the tiny seedling to the full grown tree. The evening of May 19, the formal opening of the exhibition was devoted to a private view of the display, admission being only by special invitation.

Addresses and lectures by the leading professors of the various forestry associations and colleges, with illustrations by lantern slides, moving pictures, etc., of forest life and lumbering, were among the interesting features during the week. The section which comprised the whole front of the building was devoted to the Lumbermen's Exchange of Philadelphia, of whose exhibits the famous Flemish room was most interesting. It was constructed entirely of yellow pine, finished to resemble the almost black Flemish wood, and served to show the potentialities of yellow pine in constructural work, flooring, indoor finishing etc. It was contributed by the Yellow Pine Manufacturers' Association of St. Louis. It formed a part of the World's Fair Exhibit in St. Louis, also was shown at Jamestown and Norfolk; has been on display over thirty times, and is still in first class condition. Another exhibit of this association shows cross sections of yellow pine trees, long and short leaf variety, the density and strength of this timber for structural material, paving blocks, etc. Invitations were sent by the association to all the architects, builders, painters, etc., in Philadelphia, to examine this exhibit. A representative in charge demonstrated the quality of the wood and answered various questions as to texture, finishing, durability, etc. The Yellow Pine Manufacturers' Association represents approximately 350 of the leading yellow pine manufacturing plants in Arkansas and Texas, east through Georgia and south to the gulf.

Exhibit B. Potlatch Lumber Company, through Owen M. Bruner Company, contributed twenty-five crates, consisting of Idaho white pine, rough; clear larch flooring, vertical grain; larch mouldings, including 1,000 pieces ½"x5¾" wide, 10" long, S4S. Samples white pine were given away as souvenirs.

Exhibit C of West Coast Manufacturers' Association, through Hall Bros. & Wood, consisted of a collection of various sizes of No. 1 fir stepping, sanded; slash grain fir, S4S sanded, cross section fir veneer logs, etc.

Exhibit D. St. Paul & Tacoma Lumber Company exhibited several pieces of hemlock flooring and clear spruce. Owen M. Bruner Company, in its exhibit, showed six sections of spruce, cedar and hemlock logs.

Exhibit E. H. H. Sheip Manufacturing Company exhibited some red cedar, chestnut core, cherry blocking, plain oak flooring, quartered oak flooring, two miniature piles of lumber, first showing how lumber should be properly piled and, second, how it should not be piled; also, two samples showing loss by saw knife kerf—one by band saw, other by circular saw. This exhibit was in charge of Mr. Trouth of the Sheip house.

Exhibit F. Charles M. Betts & Co., Philadelphia, had charge of Buffalo exhibit, consisting of numerous boards of different varieties of California, Michigan and Idaho white pine, gray fir bevel siding and Washington spruce bevel siding.

Exhibit G. Showed finished and unfinished samples of Cuban, African, Mexican and East India mahogany, African mahogany veneers and teakwood of Samuel B. Vrooman & Co., Ltd., Philadelphia.

Exhibit H. John E. Lloyd of the William M. Lloyd Company, Philadelphia, had charge of an elaborate display of long and short leaf yellow pine, edge grain yellow pine flooring, flat face yellow pine flooring, maple flooring, Pennsylvania hemlock, West Virginia spruce, North Carolina and Tennessee white pine, bundles of loose Washington cedar and white cedar shingles, spruce lath and samples of cypress.

Exhibit I. R. B. Rayner & Co. exhibited some No. 1 heart cypress shingles.

Exhibit J. A panel made of over forty varieties of wood, which was on exhibition in Paris and at other fairs, was exhibited by the Lumbermen's Exchange of Philadelphia.

Exhibit K. Horace A. Reeves, Jr., Philadelphia, exhibited a case of twenty varieties of hardwood all cut at one mill in West Virginia, one piece quartered white oak being 5/4-inch thick, 30 inches wide, 8 feet long.

Exhibit L. J. Randall Williams & Co., Philadelphia, had on display thirty to forty samples 3-inch long Arkansas short leaf pine, showing flooring, ceiling, base moulding and finish.

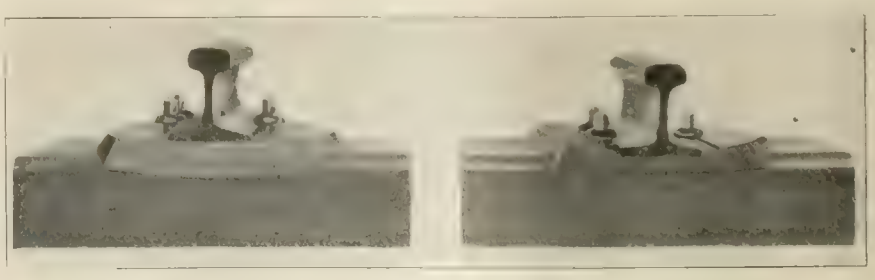
Exhibit M. Five doors showing special veneer finish exhibited by Charles F. Folin & Co., in charge of Amos Y. Lesher of this house.

Exhibit N. Photographs of Washington cedar, spruce and fir trees, Vancouver Island, British Columbia, were shown by J. Randall Williams & Co.

The committee in charge of the Lumbermen's Exchange section was composed of J. Randall Williams, Jr., chairman; Isaac N. Troth, Amos Y. Lesher, B. Franklin Betts and John E. Lloyd.

In the main hall of the building, the display of the Pennsylvania Department of Forestry, Harrisburg, which was a most elaborate and interesting one, consisted of a case of forestry instruments; twenty-eight log specimens; 121 species of seeds; bud collection; leaf exhibits and leaf charts; seedlings taken from state reserves; coniferous and hardwood seedlings from one to four years old; four cases of forest insects, exhibit of Economic Zoologists of Pennsylvania; cases of photographs showing work and condition in state forestry; map of state reserve; publications, and a relief map of Pennsylvania 4 x 7 feet in size.

The exhibit of the Pennsylvania State College was interesting and instructive—coniferous and hardwood seeds; views of forests; a miniature sawmill complete in every detail. In wood sections, rough and polished ends of commercial woods were shown; varieties of woods and logging tools; saws of every description from the factories of E. C. Atkins & Co., Indianapolis, Ind., and from those of Henry Disston & Son, Inc., Philadelphia. As a comparison with modern invention, an old time upright saw was exhibited.



HARDWOOD TIE PLATES AS USED IN EUROPE

The Chestnut Tree Blight Commission of Pennsylvania had a fine exhibit showing specimens of diseased parts of chestnut trees in every stage of progress; specimens showing surgical work employed in the treatment of diseased orchard and ornamental trees; cultures of the fungus on agar plates, and microscopic slides; photographs of trees and forests in which the blight is working. Methods for controlling the disease, also for what purpose the infected chestnut may be safely employed commercially were explained. Several boards sawed from infected trees were shown to show that the disease does not seriously interfere with the use of the wood.

The exhibit of the United States Forest Service consisted of transparencies showing the great work of this service; maps, charts, etc.

The Pennsylvania State Museums, Harrisburg, under Boyd P. Rothrock, curator, exhibited thirty-nine specimens of birds known to the forest; an animal collection including the beaver, fox, cat, coon, minx, weasel and porcupine; also specimens of pine and hardwood trees up to fifteen years old. The exhibit was arranged by W. P. Durbarow, of the museums.

The American Forestry Association, in charge of J. A. P. Farnham, assistant secretary, had an enclosed space 16x12 feet in size next to the stage of building, the background of which was covered with pictures illustrating different lines of forestry work. Samples of woods were exhibited and copies of the American Forestry Magazines were freely distributed.

Forest Fire Losses in Wisconsin

The Sawyer-Goodman Company was the heaviest loser in the forest fire that raged about Crystal Falls the earlier part of this month. The fire started in the big slash southwest of the Dunn, a slash which has been accumulating for several years. Driven by an extraordinary high wind, the fire rolled along to the big skidway where the cut of the late winter and spring was piled awaiting shipment. For two days and two nights Superintendent Cleary and his men fought the fire, but it gained headway when the logs in the rollways started. In a short time the entire cut, amounting to 400,000 feet of mixed timber, was destroyed. Owing to the fact that the logs were piled close to the slash and timber, the company was unable to get insurance, and the loss is total. A fire that got into the choppings of D. F. Boyle & Company, destroyed about fifty cords of wood before it could be gotten under control. Other losses were mainly to standing timber. The rain of May 10 and 11 quickly quenched the flames.

Johns-Mowbray-Nelson Company Moves to Yard

The Johns-Mowbray-Nelson Company, Cincinnati, O., recently leased a large yard covering an area of 500x200 feet at the corner of Eighth and Horn streets, Cincinnati. It was originally planned, as announced sometime ago in HARDWOOD RECORD, to merely install a small yard and to continue to maintain the offices of the company down town as theretofore. However, the present arrangements provide for much more extensive quarters and, in addition, the company has erected a commodious office building in connection with the yard and is moving its entire business to that location. The yard is provided with a private switch having a capacity of twelve cars. There are on the yard now about 1,500,000 feet of hardwood lumber running mostly to oak.

Ford Motor Company Plans Enlargement

It is reported that the Ford Motor Company of Detroit, Mich., is planning a tremendous increase in its capactity, with corresponding changes in business policy. According to reports, this company has let the contract for the erection of an addition to its present plant in the form of a building of 110 x 1,800 feet, six stories high. It is anticipated that with this addition the company will have an output of 1,000 cars a day. It is further reported that it is planning to reduce the price of its various types of cars in order to dispose of this immense outpout.

Purchases Flooring Warehouse of Thomas Forman Company

W. D. Magovern, flooring specialist of New York City, has bought the leasehold and warehouse of the Thomas Forman Company at Fifty-eighth street and Eleventh avenue. This purchase comprehends no other change, for Mr. Magovern will continue to represent the Forman interests in this vicinity, and the business will be conducted along well established lines, which have proved so successful. At the warehouse will be carried a full stock of oak and maple flooring from the Forman plants at Detroit and Heidelburg, Ky., and also the famous yellow pine rift flooring from the Jackson plant at Lockhart, Ala. Concurrently, Mr. Magovern announces the appointment of Simon Herrnstadt to his selling force. Mr. Herrnstadt has long been identified with the local hardwood market and needs no introduction to buyers of hardwood lumber.

Slack Cooperage in 1911

The Bureau of the Census has published data for 1911 showing the production of slack cooperage in the United States, and comparing the figures with those for 1910. Reports were received from 1,182 mills, and the output amounted to 1,382,968,000 staves, 106,407,000 sets of headings, and 353,215,000 hoops. Corresponding figures for 1910 showed an output of 1,460,878,000 staves from 1,298 mills, 97,037,000 sets of heading, and 295,712,000 hoops. These figures represent a decrease of 9 per cent in production of staves, and an increase of 9.7 per cent and 19.4 per cent, respectively, in production of heading and hoops.

Slack cooperage includes barrels, kegs, and tubs for all purposes other than as containers of liquids. Semi-tight cooperage, for butter, lard, paste, paint, and for churns and firkins, is included in the statistics.

Nearly all woods are suitable for slack cooperage staves of some kind. In quantity red gum leads, as it did in 1910. Pine, including both northern and southern species, is second, and beech is third. Elm seems to be declining. It supplied 38,000,000 fewer staves in 1911 than in 1910. It declined also in quantity of heading. Chestnut shows a decline in output of staves, but spruce is gaining. Other important woods in this industry are ash, maple, birch, oak, tupelo, cottonwood. Elm is the leading wood for hoops. Hickory, oak, and ash are considered superior to elm as hoop material, but they are less used because of higher stumpage prices.

Hardwood News Notes

MISCELLANEOUS

The Fisher Body Company of Detroit, Mich., has increased its capital stock to $1,600,000.

The R. McMillen Company of Oshkosh, Wis., has increased its capital from $120,000 to $200,000.

The Naples Lumber Company has moved its main office from Naples, La., to Baton Rouge, La.

The C. H. Krause Lumber Company of Antigo, Wis., has increased its capital stock to $25,000.

The Rockford Novelty Works of Rockford, Ill., has applied for a voluntary petition in bankruptcy.

The Cambridge Furniture Company has been incorporated at Cambridge, O., with a capital stock of $50,000.

The American Handle Works of Parkersburg, W. Va., has sustained an involuntary petition in bankruptcy.

The Pinless Curtain Pole Company is the style of a new concern at Columbus, O., with $30,000 capital.

The Segerstrom Piano Manufacturing Company of Minneapolis, Minn., has filed an involuntary petition in bankruptcy.

It is announced at Memphis, Tenn., that Lamar Heiskell has been appointed receiver for the Rex Handle Company.

The Phillips Lumber and Manufacturing Company has started business at Charleston, W. Va., with $50,000 capital.

The Jefferson Lumber Company is the name of a new concern at Wellsburg, W, Va. This company has $10,000 capital.

The H. M. Page Log & Lumber Company has been incorporated at Lexington, Ky., with an authorized capital of $25,000.

The American-Grand Rapids Furniture Company has been incorporated at Bridgeport, Conn., with a capital stock of $50,000.

The George W. Davis Carriage Company of Richmond, Ind., has changed its style to the George W. Davis Motor Car Company.

The Indiana Wood Products Company has been incorporated at Spencer, Ind. The capital of this concern is reported to be $20,000.

The Eby Auto Parts Company of Detroit, Mich., announces that it has changed its name to the Benham Manufacturing Company.

The Hoosier Manufacturing Company, manufacturer of kitchen cabinets, at New Castle, Ind., has increased its capital stock to $750,000.

The W. A. Cairn Woodworking Company of East Hartford, Conn., is now in the hands of the receivers, R. W. Hofert and F. S. Flagg.

The Benson Furniture Company has started business at Philadelphia. This concern is incorporated and has a capital stock of $10,000.

F. Lohman & Sons has been incorporated at New York City for the manufacture of office fixtures. The company has $10,000 capital stock.

The Woolworth Land and Lumber Company of Sault Ste. Marie, Mich., has been succeeded by the Chicago Mill and Lumber Company of Chicago

It is announced that the Morgan & Beers Piano Company has started business at Hartford, Conn. This concern is incorporated and has a capital stock of $50,000.

The Louisville Chair Company has been incorporated at Louisville, Ky., with a capital stock of $12,000. Among the incorporators are Daniel Weiss and J. A. Greenwald.

The Given-Moore Company announces that it has removed its headquarters from Columbus, Ind., to Spring Valley, Ill., where it is erecting a plant for the manufacture of farm machinery.

The name of the Stierlin Piano Company at St. Louis, Mo., has been changed to the Wagner-Stierlin Piano Manufacturing Company, and incorporated with an authorized capital of $100,000.

The Richmond Lumber Company has been incorporated at Richmond, Ind., with a capital stock of $10,000, the directors being Peter Kuntz, Thomas Tarkleson, Peter Kuntz, Jr. and J. A. Payne.

The C. D. Burns Lumber Company has been incorporated at Martinsburg, W. Va., by C. D. Burns, Henrietta C. Burns, C. F. Allen, Agnes Allen and J. C. Allen, all of Martinsburg. The capital stock is $50,000.

CHICAGO

E. A. Lang, manager of the lumber department of the Paepcke-Leicht Lumber Company of Chicago, has just returned from a hurried trip to Detroit, Cincinnati and Cleveland.

H. W. Nordyke of the Adams & Raymond Veneer Company, Indianapolis, Ind., was in Chicago, Wednesday and Thursday of last week, stopping off on his way to the East on a business trip.

F. S. Nichol of the Shadbolt & Boyd Iron Company, Milwaukee, Wis., stopped off at Chicago on Wednesday of this week on his way to southern hardwood dimension mills.

Nels Ducholm, for several years sales manager of the Scott & Howe Lumber Company and located at Ironwood, Mich., was in the city for several days the latter part of last week. Mr. Ducholm has just recently moved to Oshkosh, Wis., where he still acts as sales manager for the Scott & Howe Lumber Company, and in addition is sales manager for the Medford Lumber Company, Medford, Wis. The last issue of HARDWOOD RECORD contained under Milwaukee News the statement that Mr. Ducholm also represents the Mellen Lumber Company, Foster-Latimer Lumber Company and the J. S. Stearns Lumber Company, which notation was incorrect.

The most recent of the series of noonday talks given before the Lumbermen's Club of Chicago, by men prominent in civic life was that by John L. Whitman, superintendent of the House of Correction of Chicago, otherwise known as the "Bridewell.". Mr. Whitman based his talk on conditions and theory as applied to the handling of criminals and delinquents of various types. A new thought is exemplified in Mr. Whitman's treatment of the boys in his institution, who represent the very worst type of the population in the city. He stated that through kindly and thoughtful treatment actual good is accomplished, whereas under the old brutal methods many a man has been made an habitual enemy of society. His talk was highly instructive and enjoyed by all those fortunate enough to attend.

H. E. Schadt of the Hyde Lumber Company, South Bend, Ind., passed through Chicago on May 17 en route to southern mill points.

The name of the Chicago Refrigerator Car Company, Chicago, has been changed to the International Car Company.

The Roos Manufacturing Company, manufacturer of fancy furniture, cedar chests, curtain poles, etc., this city, has increased its capital stock to $100,000.

The Chicago House Wrecking Company, Chicago, has been succeeded by the Harris Brothers Company.

The Kimball-Sullivan Lumber Company of the Peoples Gas building, Chicago, has been absorbed by the Timber Products Company. This does not involve any change in the personnel or capital of the company, but merely changes it from a partnership to a corporation. At the same time it has become a wholesale instead of a strictly commission house.

F. R. Slimmer & Co. is the style of a newly incorporated concern about to do business in Chicago. This company has $10,000 capital.

John Gerts, secretary and treasurer of the Bush & Gerts Piano Company, died at his home the latter part of last week.

W. E. Johns of the Johns-Mowbray-Nelson Company, Cincinnati, O., was in the city several days the latter part of this week.

E. Bartholomew of John B. Ransom & Co., Nashville, Tenn., spent most of this week visiting the local trade.

E. E. Taenzer of E. E. Taenzer & Co., Memphis, Tenn., spent several days in the city this week.

Saturday night, May 24, the Lumbermen's Club of Chicago held what was designated as a "Campaign Stag," of which the special feature was announced as the "Blues vs. the Reds." The "blues" represent one membership team as opposed to the "reds" representing the other, These teams are headed respectively by A. H. Ruth and G. H. Holloway. In the afternoon the club entertained the national delegates of lumber sash and door salesmen.

NEW YORK

Eben J. Marsh, formerly of this city but now identified with the Flint River Cypress Company of Albany, Ga., was a New York visitor during the fortnight.

J. C. Rodahaffer, sales manager for George W. Hartzell, black walnut lumber exploiter of Dayton and Piqua, O., was a visitor in New York last week. Mr. Rodahaffer reports the plant running full time and the demand for lumber heavy.

Nelson H. Walcott, president; A. L. Stone of Cleveland; M. E. Preisch, Buffalo, and ex-President F. E. Parker of Saginaw met at the headquarters of the National Wholesale Lumber Dealers' Association on May 9 to discuss matters in connection with the bureau of information of that organization. On May 22 and 23 the trustees of the association met to consider matters from all departments in general.

BUFFALO

The first outing of the Buffalo Lumber Exchange will be held on June 17 at the clubhouse of the Buffalo Automobile Club at Clarence. President M. M. Wall of the exchange recently appointed his list of committees for the year, naming A. W. Kreinheder as chairman of the house committee and I. N. Stewart of the entertainment committee. On the various committees are the names of many of the automobile enthusiasts among the lumbermen.

May 19 was an unusual day in Buffalo, as it marked the visit of about twenty five foreign visitors to the city, as well as the coming of Governor Sulzer and other speakers interested in the subject of direct primaries in New York state. The foreign visitors were here in connection with the arrangements for a celebration in honor of a hundred years' peace between English speaking nations. The committee in charge of transportation of the guests was made up of I. N. Stewart, chairman, J. B. Wall, A. W. Kreinheder and O. E. Yeager.

J. B. Wall has returned from a ten days' business trip to the South, where he looked after the shipments of oak and other hardwoods coming to the Buffalo Hardwood Lumber Company.

Hugh McLean has returned from a trip to the McLean mills in the South, which have been running actively for some time. Stocks at the Birmingham and Chattanooga mills of the company are quite low.

W. L. Blakeslee states that trade with Blakeslee, Perrin & Darling has been very satisfactory recently. The yard is receiving large stocks of hardwoods, especially ash and oak.

The Empire State Hardwood Lumber Company is now located in the Marine Bank building, together with the Blue Grass Lumber Company, the two concerns being associated in management.

Miller, Sturm & Miller state that business in hardwoods is keeping up pretty well this month. They are selling largely oak, ash and maple, all of which are holding firm.

Anthony Miller's trade has been very fair during this month, having covered a number of hardwoods, oak being one of the main varieties. Mr. Miller says trade could be quite a little better.

The yard of T. Sullivan & Co. is shipping out some good stocks of oak and elm. May promising to be a good month.

The Standard Hardwood Lumber Company has been getting in a lot of lumber recently, much of it having been delayed by the Ohio floods. The yard switch has been filled with cars this month.

I. N. Stewart & Bro. report a little increase in the demand for cherry, but this wood is not selling as it used to. Oak and poplar are now selling in fair quantity.

B. F. Ridley of Davenport & Ridley has been spending some time in Pennsylvania, shipping maple and oak for the concern.

PHILADELPHIA

Frederick S. Underhill of Wistar, Underhill & Nixon says of business, that the rush of a month ago has subsided somewhat, but on the whole it is satisfactory. There is a little shading of prices in one or two lines, but nothing to indicate a weakening of the market generally. R. W. Wistar has just returned from Sumter, S. C., where the firm's sawmill was destroyed by fire on Apr. 28. Fortunately the planing mill and lumber were saved. Preparations are being hurried for an immediate rebuilding.

The Tunis-Cockey Lumber Company recently opened a branch office at Fayetteville, N. C., which will be looked after by W. T. Bowen, who is buyer for the concern.

J. W. Floyd of the Floyd-Olmstead Company says hardwood trading is brisk and prices firm.

Howard B. France, secretary and treasurer of the Haddock-France Lumber Company, Mt. Sterling, N. C., and of the Monarch Lumber Company, this city, reports mill running full capacity to catch up with orders. In some lines business is a little dull, but old orders are keeping things moving.

James Strong & Co. report a slight diminution in trading of late and buying carried on on a conservative basis, but hardwood values are well maintained.

The Victor Motor Car Company, Wilmington, Del., was chartered under Delaware laws May 12.

Justin Peters, manager of the Pennsylvania Lumbermen's Mutual Fire Insurance Company, says that although it is not writing quite so large a volume of new business as a year ago, the average is satisfactory and the outlook for the year very promising.

William S. Birch, formerly Philadelphia representative of the Hilton-Dodge Lumber Company, Savannah, Ga., has become associated with the McFarland Lumber Company. This company has just closed its first year in the wholesale lumber business with very gratifying results and is making preparations for a broader field of activity.

J. Randall Williams, Jr., of J. Randall Williams & Co., reports trading a little slower than last month, due to tariff agitation, belated season, etc.

Jerome H. Sheip reports that his plant is being run day and night to keep up with demand for cigar box lumber.

Forest fires in the hills near Ludlow, Pa., recently caused severe loss to timber, etc. Huge piles of logs and part of the big mill at Sheffield, belonging to the Central Pennsylvania Lumber Company, were destroyed. Four big lumber camps, two owned by David Frost, one by Eli Thorpe and another by H. Ellison, were destroyed. T. D. Collins lost about $100,000 in the destruction of a timber tract and thousands of cords of chemical wood.

PITTSBURGH

J. N. Woollett, president of the Aberdeen Lumber Company, says his May shipments will be fully double those of any past month in the company's history. He is bringing up three barges of cottonwood this month

from Joppa, Ill., for distribution. These will contain about 2,000,000 feet.

The Johnstown Folding Crate and Box Company will start operations this week in the seventh ward of Johnstown, Pa., with the following officers: C. W. Hurl, president; R. A. Long, secretary; J. H. Mosholder, treasurer; Henry I. Blough, R. A. Long and J. S. Mosholder, directors.

The Allegheny Lumber Company reports that its trade to May 1 amounted to more than for the entire year of 1909. It is well satisfied with the outlook in general.

The Kendall Lumber Company will start work June 1 on a new operation near Ohiopyle, Pa., where it has bought another large tract of hardwood timber. Its trade with the coal mining companies and the railroads is especially good.

The Adelman Lumber Company reports trade holding up well and says that hardwood stocks are getting so that there is considerable scrambling for good lumber.

The Freehold Lumber Company is doing a nice business and reports prices good. Robert Gannon of this company will make a trip among the North Carolina and Virginia mills shortly.

M. W. Chapin and G. F. Wolcott of Jefferson, O., will build a basket factory there this summer to employ forty hands. It will have a pay roll of about $300 per week.

B. V. Hull, Charles Norton and J. W. Root of Garrettsville, O., have sold the Garrettsville pail factory to H. W. Fobes & Son of Rock Creek, O. The plant will be remodeled and used as a basket factory.

Allegheny county and the city of Pittsburgh are having plans prepared for an immense joint administration building on Grant street, for which contracts will be let in the near future. The contract has already been awarded for the Kaufmann-Baer Company's department store, twelve stories high, and to cost $3,000,000. Contracts will be awarded within a week or two for the Masonic Temple on Schenley farms to cost $1,500,000. A syndicate of New Yorkers under the direction of M. B. Bates of this city has secured options on an entire square of property at Fifth and Wylie avenues and will build a twenty-story hotel there. Six or eight school houses costing from $150,000 to $300,000 each are now in the hands of architects for early letting. Other public building projects are coming forward. These will call for a large amount of fine hardwood lumber in the late summer and fall.

BOSTON

The yard and holdings of the Export Lumber Company, Mystic Wharf, Charlestown, Mass., were destroyed by fire recently. This company lost eight sheds, which were well stocked with lumber ready for shipment. The office building was damaged also. The Export Lumber Company does a very extensive business with South America. The company had between 5,000,000 and 6,000,000 feet of Canadian white pine and southern cypress ready for shipment, which was destroyed. W. A. Taft is president of the company. The loss is estimated at about $250,000 on the lumber and at least $10,000 on the buildings.

The extensive lumber mill of the Berlin Mills Company, Berlin, N. H., has been destroyed by fire, causing a loss estimated at $500,000. A thousand men have been thrown out of employment. The plant was covered by insurance and will be rebuilt.

The Rhode Island Lumber Dealers' Association will hold its annual midsummer outing on June 7 at the Pomham club, Narragansett Bay.

The Longwell-Holbrook Lumber Company, Springfield, Mass., has been incorporated with a capital stock of $50,000. The incorporators are Floyd E. Longwell, Fred A. Holbrook, Edith S. Holbrook and Jeannie L. Holbrook.

The George J. Barker Lumber Company of Waltham, Mass., has purchased a tract of land adjoining its yard, which it will use for the future development of its business.

BALTIMORE

Robert McLean, a hardwood exporter, whose affairs were placed into the hands of a receiver about six weeks ago, is in Scotland to attend the funeral of his wife, Mrs. Rebecca Stewart McLean, who died there a couple of weeks ago, after a prolonged illness.

R. W. S. Trader, one of the oldest men in the lumber business here, died May 14 at the age of seventy-eight years. He had for some years occupied offices at 740 Eastern avenue, dealing in hardwoods and yellow pine.

The plant of the Clarksburg Lumber and Planing Mill Company at Clarksburg, W. Va., was completely wrecked by fire on May 12, with a loss placed at $80,000. The cause of the blaze is unknown.

On May 13 the factory of the Delmar Lumber Company at Havre De Grace, Md., on the Susquehanna river, was laid in ruins by flames, with a loss of about $15,000. The company went into the hands of receivers several months ago and negotiations were in progress to reopen the factory under a new management.

The steamer Templemore of the Johnston Line from Liverpool, which arrived here May 9, carried among other freight, 100 mahogany logs, which had been shipped from Africa and transferred to the Baltimore vessel at Liverpool. They were destined for Grand Rapids, Mich. This is one of the heaviest shipments of mahogany logs ever recorded in the import trade at this port.

Representatives of practically all of the railroads east of the Mississippi river and agents of steamship lines are in session at Hot Springs, Va., to discuss, among other things, the question of liability for demurrage on cars held after a certain length of time. The railroads take the view that they should be paid for cars not unloaded within a reasonable period, while the steamship companies have steadily refused to meet this charge, although the responsibility for the delay really rested upon them. Various other transportation problems are to be taken up at the conference, but the demurrage problem will be one of the most important. It affects the exporters of lumber and logs especially through the Gulf ports, the insistence of the railroads on the payment of demurrage having resulted in the refusal of steamship companies to grant through bills of lading. The exporters are further inconvenienced and embarrassed by the action of the railroads in simply putting an embargo upon the movement of freight when the congestion at ports becomes too great. The exporters here are deeply interested in the outcome of the Hot Springs conference, taking the view that the matter of through bills of lading must necessarily come up for adjustment in the near future.

President R. E. Wood of the R. E. Wood Lumber Company and H. J. Bowman, sales manager of the same corporation, have been at the new mill of the company at Fontana, Swain county, N. C., which was put in operation about a month ago and has since turned out upwards of 1,000,000 feet of hardwoods. Mr. Bowman states that practically every stick of this lumber is sold and that more could be disposed of if it were available. The plant is now running regularly and the output is somewhere around the actual capacity of the mill. G. L. Wood, general manager of the company, has been paying a visit to the company's mill in West Virginia to see that everything is in good shape.

COLUMBUS

The J. J. Newman Lumber Company has opened an office in the new First National Bank building, with E. H. Hammond in charge of central Ohio territory.

W. B. Sissons, sales manager of the Sowers-Leach Lumber Company, has returned from a business trip in the South. He reports an improvement in the hardwood trade. Prices are well maintained in every way. Stocks at the mills are not very large.

The Sowers-Leach Lumber Company has employed Charles W. H. Needham to cover northeastern and southeastern Ohio, with headquarters at Columbus.

Albert Franklinberg of the Brooke Lumber Company of Pataskala, O., was a visitor among Columbus wholesalers recently.

John R. Gobey of John R. Gobey & Co. says trade is improving. Prices are steady and no weakness has appeared. Not much trouble with cars is experienced at this time.

The W. M. Ritter Lumber Company has placed Frank Lehman, formerly connected with the Jobson Lumber Company of this city in Buffalo territory, to succeed W. L. Morely.

R. W. Horton, sales manager for the central division of the W. M. Ritter Lumber Company, says the hardwood trade is very active and prices are strong in every particular. He says there is a good demand, both from manufacturing establishments and retailers. Dry stocks are still scarce. No especial trouble is now experienced from a lack of cars.

Ray Lovell of the Reliance Lumber & Manufacturing Company has returned from a business trip to Arkansas, Tennessee and other southern states.

The Urbana Lumber and Land Company of Urbana, O., has been incorporated with a capital stock of $50,000 to deal in lumber and to acquire land in Arkansas. The incorporators are W. W. Wilson, J. P Neer, C. E. Russell, W. B. Marvin and J. C. Thackery.

The Sterling Lumber Company of Columbus, O., has been incorporated with a capital stock of $25,000 to deal in lumber and building materials. The incorporators are M. C. Brandenburg, Harry T. Griffith, William C. Critchell, M. C. Billenberg and John H. Mahon.

INDIANAPOLIS

The name of the Harry Heimberger Veneering Mills, New Albany, has been changed to the H. E. Heimburger Veneer and Lumber Company.

Notice has been filed with the Indiana secretary of state that the Capital Cooperage Company of Fort Wayne has increased its capitalization $25,000.

The New Albany Veneering Company of New Albany has increased its capital stock $200,000, according to notice filed with the secretary of state.

A voluntary petition in bankruptcy has been filed in the federal court here by Calvin H. Shalday, a sawmill operator of Ripley county, whose liabilities are $4,678 and assets $1,500.

Under the United States government plan, the 2,500 lots in the new Mars Hill industrial suburb have been distributed. Among those who drew valuable corner lots were Thomas Madden Son & Co., Dynes Lumber Company and American Box Ball Company.

The Co-Operative Building Company and the Forest Building Company have been organized here and each have bought tracts of ground where they will build twenty-five modern frame bungalows.

Manufacturers and shippers met here May 21 with representatives of railway companies to discuss a petition filed by the railroads with the

Interstate Commerce Commission asking a five per cent increase in freight rates.

Hardwood floor layers have settled their strike with the employers. About 125 had been on strike since May 1. The men will receive a minimum wage of fifty cents an hour, an eight hour day and Saturday half holiday. The agreement is for three years, dating from Nov. 1, 1913.

About 700 carpenters have gone on a sympathetic strike, on account of the strike of the planing mill employes who are asking recognition of the union and a closed shop. The carpenters refuse to work on buildings where planing mill products made by non-union labor are used.

TOLEDO

A number of prominent lumber dealers joined the first trade extension trip of the season, which left Toledo May 20 on a four days' trip through northwestern Ohio, southern Michigan and eastern Indiana. These trade trips are being made annually by the wholesale and retail board of the Toledo Chamber of Commerce and have been in progress for the past couple of years. Thirty-eight towns will be visited by the Toledo "boosters" on this trip.

The Booth Column Company reports business extremely good, with orders coming in faster than they can be filled. Prices are holding up well and prospects are for an even better season than last year, which was a record breaker for this concern.

The Big Four Hardwood Company reports business in piano cases as booming. This end of the business, which is practically new, has been steadily growing and the concern has all the orders it can fill.

The Gotshall Manufacturing Company reports a good line of trade generally. The portion of this plant burned last season will be rebuilt this year and work will be begun at an early date.

MEMPHIS

Practically perfect weather has prevailed throughout the Memphis territory, and splendid progress has been made with logging operations during the past fortnight. There has been some rainfall but it has not been sufficient to interfere with either milling or logging work. As a result there is a very satisfactory supply of timber in sight. Conditions in this respect are in striking contrast with those following the flood of the previous year. Some mills have had some difficulty in securing all the timber they need, but they are the exceptions which prove the general rule of plenty.

Every plant in Memphis which was forced to close down as a result of the overflow at Memphis has resumed operations. Even the woodworking plants on Henning island have been able to start up their machinery again. This is only another way of saying the flood is entirely a matter of history, so far as the lumber industry at this point is concerned. Trade conditions are considered good as a rule and owners and operators of lumber and woodworking enterprises are not only able to run but they are working their machinery at pretty full capacity.

Practically all of the mills in the St. Francis basin, which found it necessary to close down, have been able to resume. There is one striking exception—that is in the case of the Crittenden Lumber Company at Earl, Ark. This firm has been badly handicapped by the overflow of its railroad and the consequent inability on its part to handle timber. The road is still under water for a distance of seven or eight miles and no definite time has been given for the resumption of operations.

C. R. Palmer, of the L. H. Gage Lumber Company, with headquarters at Providence, R. I., has been spending considerable time at Memphis and Earl during the past few weeks.

Traffic conditions have become normal with respect to every road entering Memphis with the exception of the Marianna cut-off of the St. Louis, Iron Mountain & Southern. The Frisco has resumed through trains direct to St. Louis over its own rails, while the Yazoo & Mississippi Valley has made the necessary repairs on its line through to New Orleans. It is estimated that it will require several weeks to complete the necessary repairs on the Memphis-Marianna cut-off. There is a great deal of timber along this road and lumbermen are awaiting the completion of the repairs with a great deal of interest.

J. W. Dickson, president of the Valley Log Loading Company, has just returned from a visit to French Lick Springs, Ind. He went there from Louisville, where he attended the meeting of the executive committee of the National Hardwood Lumber Association.

While it is confirmed that the E. Sondheimer Company will discontinue its yards at Cairo as soon as the lumber there has been disposed of, it is denied by Mr. Sondheimer that the company has any idea whatever of moving its headquarters from Memphis to Detroit. He said that the company had not even contemplated such a move. It is impossible to say how long it will require for the company to move the lumber which it has stored at Cairo. This is the second Memphis firm to decide upon the abandoning of its Cairo yards during the last year. The other was the Gayoso Lumber Company.

C. O. Scholder, southern representative of the Standard Oil Company, has been chosen president of the Business Men's Club for the ensuing year. He was elected by the directors of that organization. The Lumbermen's Club of Memphis is affiliated with the Business Men's Club and the two are working hand in hand for the interests of the vast territory of which this city is the logical head.

The Interstate Commerce Commission has handed down a decision in the case of May Brothers vs. the Illinois Central and the Alabama & Vicksburg railroads in which it held that the rates on log shipments from Pearson, Miss., to Memphis were unreasonable. The decision not only orders the rates reduced from thirteen cents to nine and a quarter cents, but also awards to May Brothers reparation in the sum of $91, together with interest from Sept. 14, 1910. This case was handled by the Memphis Freight Bureau and the victory is regarded as far-reaching, despite the fact that the amount involved is comparatively small.

Dispatches from Brinkley, Ark., report the sale of 10,000 acres of timberland near that point known as the Ravensway tract. It was purchased by a party of Pittsburgh (Pa.) capitalists. The price is given as $135,000. The new owners, it is announced, propose to put in sawmills and other woodworking plants for the purpose of developing the timber on this property. As fast as the timber is moved it is planned to improve and colonize the land.

It is definitely announced that work will begin on the new bridge across the Mississippi river at Memphis some time in July. This information comes from the chief engineer of the Rock Island System, which is backing the Memphis & Arkansas Railroad Bridge & Terminal Company, which will construct the bridge. Bids have not been advertised for this work for the reason that the Rock Island System is contemplating putting it through.

The James Alexander Construction Company has been officially notified by the Illinois Central that it has been awarded the contract for the erection of the new passenger terminal station of the Illinois Central at this point. The price named in the contract is $500,000. The old building on the site at Main street and Calhoun avenue will be torn down at once and the work of excavating will begin June 15. The new station will be used jointly by the Illinois Central, the Yazoo & Mississippi Valley, the Rock Island and the Frisco System.

The Valley Log Loading Company states that it will have loaded about 800 cars of logs for Memphis and other points on the Yazoo & Mississippi Valley line of the Illinois Central during May. This is at a considerably reduced rate as compared with recent operations of this firm. However, it is at present confining its work to the Yazoo & Mississippi Valley line because the Memphis-Marianna cut-off of the St. Louis, Iron Mountain & Southern is out of commission and will remain so for some time. W. A. Waddington, secretary of the company, says that timber is being gotten out rapidly and that the outlook is for unusually heavy loading a little later.

It is reported here that the Mark H. Brown Lumber Company has purchased the tract of 15,000 acres of timberland which was formerly owned by Messrs. Zearing and Stoneman. Mr. Brown is out of the city and it is understood that he is looking after matters connected with the transfer of the property in question. It is an exceptionally fine body of hardwood timber.

The Interstate Commerce Commission has been active in connection with several rate cases in which Memphis lumbermen are interested. One of these covers rates between Memphis and points south of this city, while another involves the proposed advance of two cents per hundred pounds on shipments of gum lumber from Memphis to New Orleans for export. At the hearing of the arguments in these cases the Southern Hardwood Traffic Bureau was represented by J. R. Walker, attorney for that corporation, and T. K. Riddick, a prominent attorney in this city. After hearing the arguments, the commission took the cases under advisement and a decision is not expected until some time later. One of the principal statements made before the commission by Mr. Riddick was to the effect that the lumbermen are paying $75,000 a year more on lumber rates than they should be called upon to pay. He had particular reference to the alleged discrimination as between Memphis and Cairo.

W. B. Morgan, secretary-treasurer of the Anderson-Tully Company, has recently returned to Memphis after attending the hearing of evidence in the Pridham box case in Chicago. Mr. Morgan was made chairman of the National Classification Committee on lumber and wooden box interests, which presented the testimony in favor of uniform rates as between goods shipped in wooden boxes and those shipped in fibre containers. He spent about five weeks in connection with this matter.

NASHVILLE

Nashville still leads in building operations. This city ranked third among the cities of the United States for the past four months, the local gain during that time being 167 per cent. For April the gain shown locally was 200 per cent.

Douglass Hanley has become associated with H. H. Tibbs in the Tibbs Furniture Company here. The firm will soon move to larger and more convenient quarters.

C. M. Morford, vice-regent for Hoo Hoo for the middle Tennessee district, announces a big concatenation for an early date, when it is expected there will be a record breaking attendance of old members and available kittens. The date for the meeting has not been announced.

During a discussion before the Nashville Lumbermens' Club at the last meeting of that organization, the fact was brought out that the railroads have not yet issued tariffs in compliance with recent orders of the Interstate Commerce Commission in connection with milling-in-transit, permitting the shipment out of hardwoods on waybills for hardwood logs shipped in whether the lumber outbound is identical with the

lumber cut from the logs as shown in the waybills. Re-shipping privileges were fully considered by the members of the club together with what action the club should take in the premises. It is claimed that to date the railroads have not abandoned their system of keeping a record of inbound logs and outbound lumber shipments in order that advantage may be taken of through rates. In the first place, the local club will try to get the railroads to issue these tariffs and what further action will be taken will be decided later. In the meantime, the transportation committee of the club will continue to work on log rates.

H. H. Snell representing the Lathrop Lumber Company, Birmingham, Ala., was a recent visitor to the local market.

BRISTOL

The H. P. Wyman Lumber Company of this city, is preparing to start its new mill in Lee county, Virginia, where the company has purchased a large area of hardwood timberland. A line of railroad, connecting with the Virginia and Southwestern, is now being constructed.

Parties interested with J. A. Wilkinson have just closed a deal for one of the best small tracts of timber in Sullivan county, Tennessee. It is situated on Eden's ridge, fifteen miles south of Bristol, and consists of 600 acres. The consideration is said to have been in excess of $40,000. The property will be developed at an early date.

Among the buyers on the Bristol market this week were George P. Bartlett, a wholesale lumberman of Philadelphia and J. W. Hodlin, representing the Virginia Lumber Company, of Columbus, Ohio.

T. G. Griffin of Price & Pierce, Ltd., London, arrived this week to file a claim of about $50,000 against the J. A. Wilkinson Lumber Company, Inc. The first dividend is being held pending the filing of the London claim. Trustee Whaley has sold off most of the assets and has the cash in bank ready to disburse as soon as the contest over the Price & Pierce claimed is settled. Some of the creditors contend that it is in fact a claim against J. A. Wilkinson individually and not the J. A. Wilkinson Lumber Company, Inc.

The Tennessee Lumber Manufacturing Company, which has operated a band mill at Sutherland, Tenn., for many years, is closing out its operation and shipping the stock on its yards. The company will withdraw from this section.

The Peter-McCain Company will shortly begin the development of a tract of timber in Carter county, Tenn., which it purchased at $50,000. The company will soon exhaust its timber supply in the Holston mountains on the Holston Valley railroad. The Carter county timber will be hauled to the band mill in this city.

John C. Anderson, vice-president of the Bristol Door and Lumber Company, Inc., a prominent banker of Bristol, died last week at the age of sixty-three years.

The Paxton Lumber Company is doing an extensive business. The company is now operating in Bristol, in western North Carolina and near Charleston, W. Va.

The Adams Lumber Company has purchased an additional tract of timber south of Blountville and will continue cutting in that section for some time.

LOUISVILLE

The Kentucky-Indiana Hardwood Company, which started business in Louisville about a year ago, has purchased the entire block on which its yard is located, at Twenty-third street and Standard avenue. The company is making fair progress under the management of Herbert A. Bauman.

Edward S. Shippen, president of the Louisville Point Lumber Company, was the host of the members of the Louisville Hardwood Club and their ladies at a dinner given at his home last Tuesday evening, May 20. Covers were laid for twenty-four. The dinner was informal and thoroughly enjoyable.

A. E. Norman, Jr., of the Norman Lumber Company read a paper before the Louisville Hardwood Club recently, dealing with the management of a wholesale yard, in which he discussed the proper layout and equipment of the yard as well as the handling of men. Although Mr. Norman has been out of college for only a year, having graduated from Princeton in 1912, he has taken hold of the lumber business in fine style, and coming from a family of lumbermen has made an auspicious entry into the business. His paper showed a fine grasp of the details of running a wholesale hardwood yard.

D. E. Kline of the Louisville Veneer Mills may be wearing the title of president of the largest commercial organization in the country before very long, as he recently became first vice-president of the Louisville Commercial Club, which claims the distinction of having more members than any other business body in the United States. Mr. Kline has been a director and active in the work of the club for a long while, and was reappointed to the important post of chairman of the transportation committee. Incidentally, it may be noted that Mr. Kline is serving his second term as vice-president of the Louisville Hardwood Club.

The mill of the Edward L. Davis Lumber Company has been running day and night of late, the demand for lumber having been such as to warrant overtime operations. The company has been getting in plenty of logs and is in good condition to keep up its fast pace, as far as the double-shift manufacturing plans are concerned.

Mahogany logs are not particularly plentiful and the C. C. Mengel & Bro. Company, which has been running steadily for months with a good deal of night work in that period, in an endeavor to catch up with the demand for lumber, may have to curtail its operations in the near future on account of a shortage of material. However, more logs will arrive from Central America in a short time, so that the interim will be short.

Some question has arisen as to when the Louisville & Nashville expects to adopt the suggestion of the Interstate Commerce Commission as to milling-in-transit rules. The commission suggested, in an opinion handed down several months ago, that it would be in line with its ideas to have the lumbermen substitute hardwoods for hardwoods in shipping out lumber corresponding with log tonnage affected by the milling-in transit arrangement, but the Louisville & Nashville, the principal carrier affected here, has not seen fit to make the change. Hardwood men are still making their reports to the Southern Weighing and Inspection Bureau with oak tonnage canceling oak tonnage and ash, ash. This is obviously a hardship and makes it difficult if not impossible to get the refund on a large number of mixed cars, which probably predominate in this territory.

Active railway construction work affecting the lumber trade will be carried forward this summer, the Lexington & Eastern having decided upon another extension up Rockhouse creek from Whitesburg, a distance of twenty miles. The Cincinnati, Licking Valley & Virginia, which will build up the valley of the Licking river into eastern Kentucky, announced from its headquarters at Winchester that plans had been completed for construction work and that contracts would be let shortly.

Leland G. Banning of Cincinnati, O., has purchased the sawmill of the Eversole Lumber Company at Frankfort, Ky. W. S. Rosson will remain in charge of the plant as manager. The Eversole company has its headquarters at London, Ky., and has been prominent in the Kentucky river trade for several years.

ST. LOUIS

The Lumbermen's Club of St. Louis will hold its next monthly meeting at the Glen Echo Country Club, in St. Louis county, on Tuesday evening, June 10. The ladies have been invited to attend this meeting. The speaker of the evening will be N. S. Darling of Oklahoma City. There

MEMPHIS

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plain and quartered red and white oak, ash, gum and poplar.
ALSO FULLY EQUIPT DIMENSION PLANT
Memphis, Tenn.

will be the usual banquet. Members of the club and their ladies will go out to the club either by automobile or special street cars. More definite information will be given later as to the means of transportation, time of meeting, etc.

Cards are out announcing the marriage of Miss Dorothy Wall of this city to Frank J. Liebke of the C. F. Liebke Hardwood Mill and Lumber Company, which will be celebrated Wednesday evening, June 3.

The offices of the Wabash Hardwood Lumber Company, now located at Memphis, Tenn., will be moved to this city on June 1. This company is a subsidiary company of the Hooton Hardwood Lumber Company, which now has its offices in the Wright building, and whose headquarters are at Terre Haute, Ind.

E. W. Blumer, sales manager of the Lothman Cypress Company, is in Iowa on a selling trip. Business with the company is reported as being quite satisfactory.

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GUM AND COTTONWOOD

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The C. F. Liebke Hardwood Mill and Lumber Company reports about all the business it can handle. The main shaft of its mill, which broke a few days ago, is being rapidly repaired. Operations will be resumed early next week. The company will be kept busy for some time as 500,000 feet of logs now on the way from the South are expected to arrive within the next few days.

There will be a reception and house warming at the Lumbermen's Club rooms, on Thursday, May 22. The rooms have recently been redecorated and fixed up and President T. C. Whitmarsh conceived the idea that a reception to the members and their lumbermen friends, would arouse enthusiasm among the members as well as show those who have not visited the rooms recently the many improvements which have been made. It will also give the members a chance to meet socially the new secretary of the club, O. A. Pier. The reception will be from 1 to 3 o'clock.

The C. F. Luehrmann Hardwood Lumber Company reports a seasonable demand for nearly every item on the hardwood list. There is an especially good demand for high grade oak and St. Francis Basin red gum, the latter being one of the specialties of the company.

ARKANSAS

On May 13 the large handle factory of Sallee Brothers at Pocahontas was destroyed by fire. Although the night watchman was on duty at the time, he was unable to give any information as to the origin of the fire. The loss is estimated by R. E. Sallee at $10,000, covered by only $3,000 insurance. The company expects to rebuild the plant within a short time and proceed to manufacture the supply of timber which it now has on hand a quantity sufficient to run several months.

The Hickory Ridge Stave Company of Hickory Ridge, Ark., on May 14 filed articles of incorporation with the secretary of state of Arkansas. The capital stock of the new concern is $15,000, of which $6,000 has been paid in.

The new spoke factory at Waldo, owned by J. W. Maxwell, has recently been completed and will begin operations at once. Much timber has been placed on the grounds and the factory will run at full time from the start.

The Grant Lumber and Timber Company of Leola, Ark., has recently added some new machinery to its plant at that place. In the future the company will use its waste material from the hardwood department for chair stock.

J. W. Wilson of the Hardwood Dimension Lumber Company of Shreveport, La., has recently bought the sawmill located at Caledonia, Ark., and formerly owned by the Arkansas Wholesale Grocer Company of Eldorado. This mill, which is located on the E. & W. railway, four miles west of Eldorado, will be overhauled and new machinery installed, increasing the capacity of the mill to 30,000 feet daily. The new mill will employ twenty men.

Frank Fee of the Fee-Crayton Hardwood Lumber Company, hardwood manufacturer, with offices at Dermott, Ark., recently left for Canada, where he will attend to some business for a week or two before sailing for Europe. Mr. Fee expects to visit the African markets before returning to his home in Little Rock.

According to statistics compiled by the Census Bureau at Washington, D. C., Arkansas now ranks first among the states of the Union in the production of barrel heads, and occupies third place in the production of barrel staves. The production of barrel heads in Arkansas during the year 1911 was three times the amount produced during the preceding year. This remarkable gain, together with the losses in production of barrel heads by Michigan, Missouri and Tennessee, places Arkansas first in the production of this commodity. The total output of barrel heads in Arkansas during the year 1911 was 15,352,000 sets, and that of hoops was 30,219,000.

The statistics relating to the production of slack cooperage stock during the year 1911 also shows that the bulk of the ash staves produced in this country was furnished by Arkansas and Missouri.

Although the flooded conditions along the eastern border of Arkansas are not nearly so bad as those following the floods of 1912, the losses sustained by a number of lumber manufacturing concerns in that section are much greater than was originally thought, and it will probably be several weeks before all of the mills in that section will again be in operation. The Forrest City Manufacturing Company and other hardwood lumber plants, though not reached by the flood waters, have been unable to run since the overflow by reason of the fact that the timber districts from which they draw their supplies lie in the bottomlands, where it is impossible for wagons and teams to do any hauling.

MILWAUKEE

A new furniture factory is about to be started at Waukesha, according to an announcement of Walter R. Frame, president of the Waukesha Business Men's Club. The Universal Furniture Company of Chicago will soon begin work on the erection of a factory measuring 60 by 350 feet, which will give employment to sixty men.

A deal has been closed whereby the entire Gillett interests in the Chetek Lumber and Supply Company at Chetek have been acquired by A. E. Beckwith and K. Rosholt. Mr. Beckwith has been president and

manager of the company and now owns the controlling interest. Mr. Rosholt is a new member of the firm. More capital will be added and the business will be enlarged if present plans materialize.

The Midland Lumber Company of Minneapolis has filed articles of incorporation with the secretary of state of Wisconsin, giving its capital stock as $200,000 of which $100,000 is invested in property of this state.

The Abrams Lumber Company, which was noted as incorporated with $10,000 capital in the last issue of HARDWOOD RECORD, has leased a yard on the Milwaukee road line at Abrams. Later it is proposed to extend the business to other points. The principals of the company are Green Bay men. Enos Colburn, president, has been engaged in the wholesale lumber business for many years and will be in charge of affairs with headquarters in Green Bay. He will also continue his jobbing business in that city. John Kettenhoffen is secretary and C. J. Smith treasurer of the company.

A substantial four-story addition is being erected to the large manufacturing plant of the Sheboygan Couch Company.

The Wisconsin Central Lumber Company has taken over the interest of Wolf Brothers in the Wolf-Yahr Lumber and Fuel Company of Neenah. Mr. Wolf has not decided as to his future, but Mr. Yahr will remain in the offices with the Wisconsin Central Lumber Company at Neenah.

The sawmill of J. L. Hawn at Rock Elm was recently destroyed by fire, but the yards full of logs and lumber were saved from damage. The Hawn sawmill was the oldest in the county.

The Hardwood Market

CHICAGO

The local trade seemes to have recovered fully from the unfortunate influx of transit shipments of southern territory immediately prior to and during recent floods. That is, these flood stocks are not actually coming in competition with the usual sales, but they have had the effect in some quarters of stocking up certain consumers with the result that they are not in the market for other items. One prominent hardwood man states that, while he disposed of his entire hardwood stock without any particular difficulty and at very satisfactory prices, the result is that he has to look elsewhere for a considerable percentage of his orders which would have been more evenly distributed had not transit shipments been necessary. The building trade in Chicago seems to be holding up very nicely, and without any serious labor difficulties there is every assurance that it will continue to be a satisfactory consumer of lumber for months to come. The easing off tendency of the general market is exemplified to a certain extent in Chicago, but no one seems to be seriously troubled over the situation as it is generally conceded that such an easing off in demand cannot be permanent at any point. This optimism is further strengthened by the rigid adherence to price conditions which have prevailed for some little time past.

NEW YORK

The rule of supply and demand governs the hardwood market here at this time, if ever it did. The local manufacturing and consuming trades are buying only for actual needs. The wholesale trade is in the market for stocks and it is no easy matter to get control of any appreciable amount. Good lumber is quickly taken at high prices. The volume of business done is less than was looked for some months ago, but the range of prices continues high and firm because of the low supplies available at wholesale. The general conditions of trading are, on the whole, quite satisfactory, and no general stocking up is anticipated under current conditions. Oak, ash, maple, birch and basswood are in best demand with the remainder of the list in good call. There is no immediate prospect of lower values.

BUFFALO

The hardwood trade holds up well at present and the strength of the market is very satisfactory. Dealers say their orders have held up better than they had expected. New England is not taking much stock as compared with past records, but elsewhere the trade has been at least up to the average. The local market has been fortunate in escaping the flood troubles prevalent elsewhere, and dry stocks compare favorably with those of other centers.

The largest trade is still being done in oak, and on account of the lack of dry stock there is much strength to prices. Quartered oak has been doing a little better than formerly, though it is not yet very active. Ash is one of the scarcest woods and quotations are showing much stiffness. Birch and maple are in average demand and stocks of these woods are now beginning to come in to some extent by lake.

PHILADELPHIA

A somewhat relaxed buying characterized the opening of the fortnight's business, but with the advent of more seasonable weather inquiries have increased and orders are multiplying. It is admitted, however, that buying still continues on a conservative basis and that the purchaser is loath to place large orders for future delivery. Although the tariff question does not directly affect hardwood lumber, its protracted settlement is bound to hamper kindred lines of trade, especially the boxmaker, and the low grade lumber manufacturers are kept in suspense. So far the box manufacturing business has continued active and the box lumber pile is cleaned to the ground, but what will be the word later on no one can say with strict accuracy.

The wholesale consuming factories continue fairly busy for this time of the year and orders are still forthcoming. Prices in all standard woods hold firm; dry stock is bought up on sight, but is scarce. The absence of premium offers on cars of lumber in transit shows the actual situation of the buying market. Although some of the lists indicate a slight increase of stocks in certain lines at mill points, there are no

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¶ Operating cost much less than yarding practice.

¶ Can be employed with or without a dry-kiln.

¶ Lumber from the saw can be air-dried in from ten to forty days; kiln-dried in from one to six days.

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CHICAGO

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visible signs of a possible weakening in values in the near future. The business situation on the whole is very satisfactory and the trade feels encouraged over prospects for summer trading.

The respective positions of the various woods remain practically the same as a fortnight ago. Plain oak and quartered oak are topliners; ash and maple strong; chestnut continues firm, with sound wormy increasing in popularity; birch and beech are in good call; poplar is steady, wide poplar strengthening; cypress lacks snap and shows a slowing up in tank sizes; veneer and mahogany business is brisk.

PITTSBURGH

In some spots there is a little easing off in buying. Wholesalers are not sure whether this has come to stay or whether it is merely a ripple on the surface. In general the business situation here looks fine. Buying ahead in many lines is larger than it has been the past few months, owing to the number of large buildings about to be started in this city. The number and importance of the city buildings or contracting jobs which are being awarded and which will use large amounts of oak and beech is such as to warrant lumbermen in their prediction that business in hardwoods will be a great deal better this fall than this spring. The furniture business keeps up well and so does the demand from implement concerns and vehicle people. Prices throughout the hardwood list are firm, with oak and chestnut scarce and bringing premiums in some stocks.

BOSTON

There has been no abatement in the strength with which prices are held in this market. The manufacturer who makes a concession in price today is either financially weak or he is not planning to deliver what the buyer expects to receive. Practically all advices from manufacturers show small stocks of dry lumber. While lumber buyers may be able to pick up softwoods at lower prices than they could a few weeks ago, the market for hardwoods has grown even firmer than it was. Dealers in this market state plainly that it is difficult for them to locate all the stock they need.

Manufacturing consumers of hardwood lumber are fairly busy. The piano business has been very good, and reports from furniture manufacturers are encouraging for the most part. Manufacturers of interior house finish are doing an excellent business and have plenty of work ahead of them. There has been a very good call for veneers in this market.

Plain oak has never been so firm as it is at the present time. Offerings are small and demand is good. Dry stock is in very small offering. Quartered oak is in larger call than usual, and prices are firmly maintained. A little easier feeling is noted in the market for cypress. Maple flooring is in fair call. Whitewood is fairly firm with a moderate amount of new business reported.

BALTIMORE

There is no reason as yet to modify materially the reports about the state of the hardwood business, which remains good, with the demand for most of the standard stocks active and the returns very satisfactory. Many of the sellers are still unable to get lumber in sufficient quantities to meet the requirements of their customers, and while the range of quotations has not moved any higher, it is at least stationary, no decided easing off having taken place. To be sure, there are some unsatisfactory spots in the business, chiefly those relating to the exports. Oak planks have gone into the Liverpool market in such quantities that the arteries of trade are fairly well congested and any further additions are likely to cause real unsettlement. Thus far the matter has not gone beyond managable proportions, but it appears clear that the forwardings cannot be continued at the rate attained during the past few months without actual and real impairment of strength. It is reported that some foreign brokers are laying out planks of the desired length for delivery and yarding the short lengths, which is considered by experienced exporters as a practice productive of losses. The foreign requirements of poplar and other woods are also of fair proportions and the returns are reported to be fairly satisfactory, though some of the lower grades are hardly as strong as they have been.

The domestic business in practically all woods appears to hold up very well. Here and there some less favorable information crops out, but the preponderance of sentiment in the trade is that the movement has not been appreciably impaired, while prices are about as high as they have ever been. Whatever changes may have taken place are to be looked for in a slightly more liberal offering or perhaps in a demand just a shade less active, if such a lessening has actually taken place. In the opinion of many hardwood men the situation is exactly the same as it has been, with the mills still able to dispose of their output as fast as it is made ready for the market.

Chestnut of all kinds is in excellent request, with prices attractive and with the manufacturers out of stocks. The lower grades of poplar are perhaps not so strong but basswood is bringing the highest prices realized, and the sellers are getting $2 or more over the figures of last year. Gum is also in fair shape, with only cypress draggy. This latter wood seems to have lost in the favor of the builders, and the demand is decidedly less active than it was during the winter, while the quotations have eased off.

COLUMBUS

Activity prevails in the hardwood trade in Columbus and central Ohio. Since the spring building season has opened up there has been a good demand from the retail trade for stocks of all kinds. Retail stocks, which were fairly large earlier in the season, have been reduced, with the result that dealers are in the market for immediate shipments. Prices are ruling firm and there is no disposition to cut prices in order to force the market. Buying of hardwoods is pretty well distributed between factories and the retail trade. The former are good buyers of all stocks. Furniture, implement, automobile body and vehicle concerns are probably the best buyers.

Some trouble is being experienced from a shortage of cars, but to date the situation is not serious and railroads are now able to care for freight shipments better than formerly.

Quartered oak is in good demand and prices are ruling strong. There is also a good demand for plain oak. Poplar is selling better and prices are firm. Chestnut is also in good demand and the volume of business is increasing. Ash and basswood are in good demand. Other hardwoods are unchanged.

One of the best features of the trade is the good feeling shown in business circles generally. While the flood was a serious blow to central Ohio, it has not been so bad as was expected, and the flooded districts are rapidly recovering from the effects of the high waters. People have cleaned up to a large degree and repair work has begun on the damaged buildings. A great many new buildings will be erected to replace those destroyed by the flood.

CINCINNATI

There is a steady demand for most all of the hardwoods, the better grades of poplar being the only items that are not moving satisfactorily, although there is a very active market for No. 2 and No. 3 common. Plain oak is moving freely at top prices, as is also quartered oak. Ash is in good demand and thick stock is short, many dealers being in search of it most of the time. Chestnut is moving well at good prices, sound wormy being particularly in demand right at this time. Cottonwood and gum in low grades are in a strong position and command stiff prices. At producing points manufacturers claim that they are sold up to the saw right along and have no surplus stocks of any hardwood. They are not booking orders very far ahead; if they do, the top price is asked for the product. The market is as firm now as at any time during the last six months, the only change noted being a little more stock than formerly, due to good logging and milling conditions during the winter. The early summer business is expected to be good and there is not likely to be any summer dullness during July and August as the demand is of a steady kind and comes from wood consuming plants that are well supplied with business, sufficient to carry them along for some months to come.

The best of weather continues in this district, which has been very favorable to lumbering. At the big hardwood yards one hears nothing but optimism as to the prospects for nice business this year.

TOLEDO

Local hardwood conditions are about as they have been for some time past. Toledo yards are not very well filled and practically all offerings of dry stocks find ready buyers. Owing to the floods in the South dry stocks are extremely scarce and shipments are slow. There is a brisk demand for plain oak from the building trades. Automobile concerns are also using a large amount of hardwoods. Boxing and crating materials are extremely scarce and high. Prices are being well maintained all along the line and there are no concessions being made.

INDIANAPOLIS

With prices steady, a good demand and shipments moving promptly, hardwood interests express themselves as well satisfied with present trade conditions. The amount of business is not phenomenal but it is better than it was at this time last year.

There is some fear, however, that the strike among the building trades in the city will affect to some extent the demand for hardwood interior trim, in which there has been an excellent trade so far this year. The furniture factories, however, are still having a heavy run and are buying in large quantities.

Automobile factories are winding up their season and are preparing for the new season. Most of them are expecting a continuation of good business during the ensuing season.

All grades of oak are in special demand. There is also a big demand for poplar and for mahogany veneers.

MEMPHIS

The demand for hardwood lumber here is not quite so active as it was a short time ago. Several firms have complained of a falling off in the number of inquiries received as well as in the number of orders booked. Still there is a reasonable amount of business under way and there is no particular change to record in prices. Stocks of shipping-dry lumber, as a rule, are not large and members of the trade here believe that there will be no weakness developing in the immediate future. There is a particularly good demand for all grades of plain oak in both red and white, and the situation is wholesome so far as quartered oak is concerned. There is an excellent demand for the lower grades of gum and cottonwood, and box manufacturers make no effort to conceal the fact that they are meeting with difficulty in securing all of this character of lumber needed in their business. Prices are exceptionally well maintained. Sap gum is selling readily and red gum is in good demand in thin stock, which is being used for export. There is a good demand for the lower



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Beyond this he is assured of prompt and painstaking service, and a quality of product not usually obtainable.

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grades of cypress, but the upper grades are in only moderate request. The demand for ash is large enough to take up practically everything that is offered here and prices are well maintained. Export business is still good and the volume of business in that direction is about the average for this time of year.

NASHVILLE

There is continued strength in the local hardwood market. Trade is brisk, prices rule steady and the members of the trade seem satisfied with existing conditions. There is an increasing activity in building operations, and the retail trade is being benefited accordingly. The call from flooring factories, box and crate and furniture manufacturers is active. There are increased stocks of hardwoods on hand compared with a week or two ago. Vehicle and implement makers are strong in their demands for stock. Prices are stronger. Plain and quartered oak is still the leader in demand. Hickory shows an improvement. There are ready sales for ash; gum, cottonwood and chestnut are each in good demand; poplar and basswood are steady; cypress shows no change. Low grades are showing more activity. Railroads are placing good orders for immediate use. There is no trouble in securing necessary cars for eastern shipments and they are consequently heavier. Collections show improvement. Yard trade will increase materially when farmers have time from their crops for other work about their plantations.

BRISTOL

Bristol lumbermen report that business continues brisk. Prospects for summer trade are said to be bright. It is not thought that the usual vacation lull will be as pronounced this year as usual, on account of the general briskness that now characterizes trade and the eagerness of buyers to secure stocks. Prices continue satisfactory in the main and the general belief here is that there will be a further stiffening during the next few months. The lumbermen have the utmost faith in the future of Bristol and many are showing it by purchasing new timber and installing new operations.

LOUISVILLE

Conditions in this market have been satisfactory for some time, and while they have been generally featureless during the past two weeks, this is a time when no news is good news. The trade is continuing optimistic as to the immediate future, not appearing to take seriously occasional predictions as to the dire influences of tariff revision. While it is agreed that the revisionists are doing their work so thoroughly that certain industries will be set back for a time at least, it is pointed out that there are comparatively few of these, and that the generally sound condition of the country will more than offset possible damage. With the tariff factor looming large during the summer, however, normal quiet is expected to reign during the next three or four months, and then, if the crops are all that they are expected to be, a brisk fall trade should be enjoyed. Right now it is difficult to find room for complaint. Lumber of all kinds is in good demand and plenty of stock seems to be moving, so that dealers are in a better position to take care of their customers than at any previous time this year. With prices firm and consumers apparently enjoying sufficient demand to insure continued calls for material, good business is assured for some time to come.

ST. LOUIS

There has not been so much activity shown in the hardwood market during the past couple of weeks as there was during the latter part of April and the first couple of weeks in May. This can be accounted for because a great quantity of lumber was shipped north from the producing territory just previous to the high water. Pretty nearly every order received by the producers was increased during that period. This resulted in the yards and consumers being pretty well stocked up and it is decreasing the amount of lumber now being bought. It is the general opinion that trade wil not be brisk until that lumber has been used up. The reduction in sales is being felt not only by the mills but by the yards as well. There still continues to be a good demand for plain oak. All low grade stocks are also in good demand. Strong prices prevail and it is not thought that prices will go any lower for some time as so many of the mills were compelled to close down during the high water that production was curtailed. These mills will probably not resume operations for some weeks. Meanwhile the lumber dealers are taking advantage of the quiet interval by making an effort to get in stock in anticipation of a big call during the summer months. Dry stocks are very scarce not only with the dealers but at the mills as well. Cypress conditions are excellent and a continuation of the present good demand is looked for. Yards and consumers are buying freely, most of the items commanding good prices.

ARKANSAS

The demand for hardwood in the Arkansas market continues strong, and the supply is unusually short. By reason of the recent floods, which have prevented a large number of mills from operating at all and reduced the run of a number of others, the stocks are badly broken and it is hard to find a complete assortment. The building in the rural districts

is somewhat light, as is customary at this time of the year, but in the cities and towns it has been unusually active. The indications are that Arkansas will come forward this year with her usual good crops, in spite of the setback from the floods, and it is expected that construction in the country districts will begin with vigor a little later in the year.

MILWAUKEE

The first Wisconsin crop report of the present season has placed lumbermen in an optimistic frame of mind. The report shows that conditions are much more favorable than at this time a year ago and indicates that the prospects are for a crop more bountiful than the bumper crop of 1912. This ought to assure plenty of building during the coming summer and fall.

The demand for hardwood seems to be increasing and has recovered from the temporary set back experienced recently. New hardwood stocks from northern Wisconsin are arriving in the local market, but it is not drying fast enough to offset the shortage in upper grade stuff, and further advances in price are expected. Most of the new stock which is arriving is being rushed into dry kilns in order that it may be ready for use.

Birch, maple and basswood are especially scarce in the northern hardwoods. Low-grade birch has been selling so well of late that it has been next to impossible for anyone to accumulate any stocks in this line. Shipments of red and white oak from the South are still light as the delay in shipping has not been overcome to any extent.

The box manufacturers have been placing some good orders, which has resulted in a shortage of most low-grade stuff. The sash and door and interior woodworking concerns are buying a little more freely, evidently as a result of the increased building activity.

LIVERPOOL

Market conditions have been more active during the past few days, though values are barely maintained. The freight charges show some signs of being reduced so that in all probability the returns to shippers will show up better on the lower values than they did a few months ago, when all prices were very high. Ash planks show quite a firm tendency, and values have advanced fully a penny during the current month. Firsts and seconds grade is the most popular. Any shippers of good hard ash will not find much difficulty in selling from 1½" to 4" stock. The best thickness is 3", which always finds a good market. Hickory values have slightly recovered from their downward tendency, but prices have not yet gained much. All the stock imported is going very rapidly into consumption, and only the fact that all the wood came in at once sent the prices down. Oak values keep good. There has been a very heavy import of wagon oak, but the market has kept prices on a firm basis. The birch market is anxiously awaiting the arrival of the new wood and prices should show a firm tendency. Poplar stocks are light and should go up in value. Shipments without definite orders, however, are not advised. Recent imports of walnut have sold well and at high prices. The recent mahogany sales were well attended and high prices were realized in every case, showing a distinct advance over previous sales. In fact, in view of the increased demand for all classes of African mahogany and the unlikely event of any increase in supplies, there is every probability of higher values being obtained. At any rate, there does not seem to be even a remote possibility of any reduction in immediate future.

GLASGOW

Though business continues quiet in the local timber trade, there is the general feeling that very shortly things must come away. The policy of merchants buying to cover immediate requirements still continues, but it is hoped this will cease ere long. Shipbuilding inquiries still continue to form the chief item, but even these have fallen off to a great extent. The packing case trade seems to be picking up and any spruce arriving is eagerly sought after. Prices are being maintained on a steady but none too profitable level, as freights are still maintaining the firmness which has existed for some time. Riga stock is also in good request, although arrivals have been very sparse as yet. The import of birch logs still continues, and the principal buyers of round logs—who, it is said, use from 80 to 100 logs per day—appear to be getting filled up. Of birch plank, however, imports are and have been decidedly light and the occasional parcels which have arrived met with a ready sale.

The quays are now well cleared and deliveries of recent arrivals are proceeding briskly. The more important arrivals include the "Parthenia" from Baltimore and Newport News with oak logs, planks and boards, walnut, hickory and ash logs and lumber. The "Parthenia's" cargo includes principally oak on contract and the quality of the oak lumber is well up to the average. Sales ex this steamer are reported to be numerous, particularly of the oak planks. A cargo of Gaboon mahogany comprising 1,300 logs, has just arrived, but sales as yet have been very few, owing no doubt to the increased prices being demanded. Freight rates are now certainly on the downward scale and the latest report is a fixture Gulf to Greenock 100/— July.

The "Kylemohr" from Mobile has arrived and discharged a quantity of ash and hickory logs at Glasgow, after which she went down to Greenock and there discharged 4,416 logs sawn pitch pine and 210 logs hewn oak.

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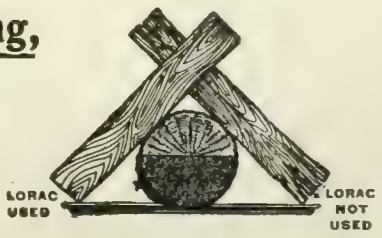
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15,000 acres land, store building and employes' houses.
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Plain and Quartered

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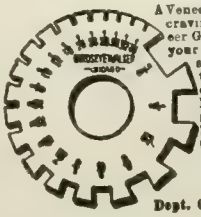
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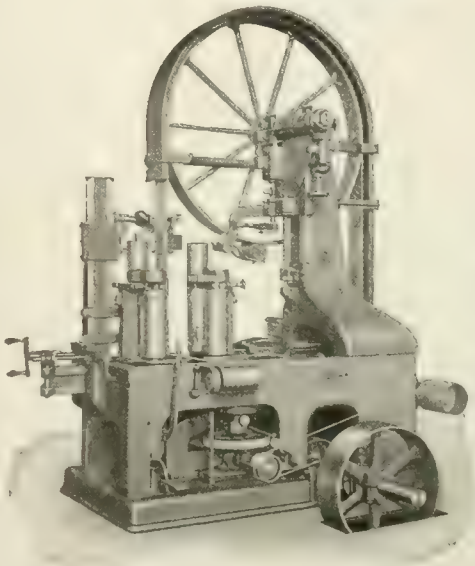
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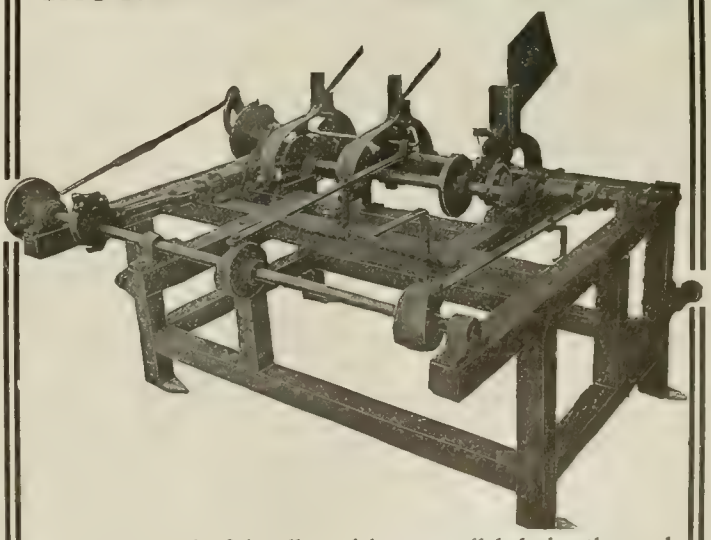
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Let us send you full details of this remarkable showing and of the machine that accomplished it!

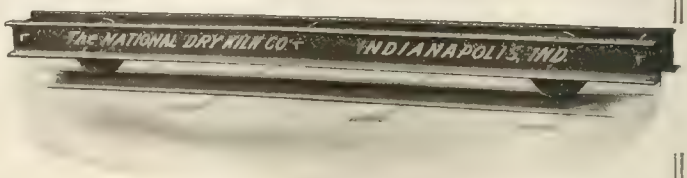
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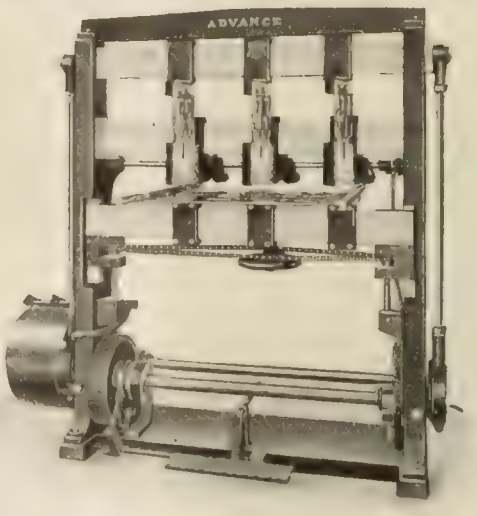
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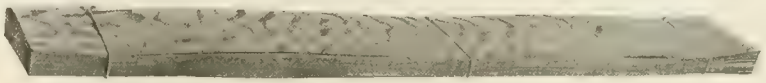
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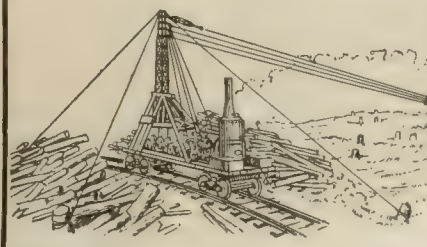
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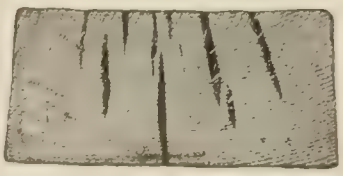
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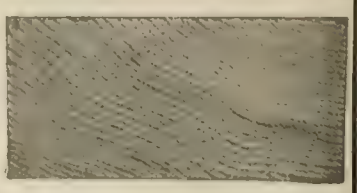


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ANTHONY MILLER
HARDWOODS OF ALL KINDS
893 EAGLE STREET

G. ELIAS & BRO.
HARDWOODS
White Pine, Yellow Pine, Spruce, Hemlock, Fir, Lumber, Timber, Millwork, Boxes, Maple and Oak Flooring
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I. N. Stewart & Bro.
Specialties
Cherry and Oak
892 Elk Street

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant, Kitchen & Company

Manufacturers Old-Fashioned Soft Yellow Poplar

5-8 and 4-4 in Wide Stock, Specialty

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

YOU pay a *little* more for our hardwood lumber than you do for many others', but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer, let's get acquainted.

LITTLE RIVER LUMBER COMPANY **Townsend, Tenn.**

W. H. White Company
Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.
Sales Office: BUFFALO, N. Y.

STOCK DRY—STANDARD GRADES—BEST MANUFACTURE—CAR OR CARGO SHIPMENTS

WE OFFER
All Kinds
OF
Hardwood and Hemlock
Lumber
Hardwood
Flooring, Lath
AND
Dimension Stock

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED
POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD

SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Hardwood Record

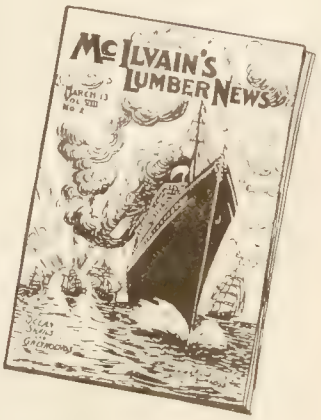
Eighteenth Year,
Semi-Monthly.

CHICAGO, JUNE 10, 1913

Subscription $2.
Single Copies, 10 Cents.



ADVERTISERS' CLASSIFIED DIRECTORY FOLLOWS READING MATTER.



¶ When we say every month that we are always glad to be tested on rush orders, we mean just this, exactly.

¶ Never hesitate to call on us when you want the goods in a hurry.

¶ Prompt delivery is the "McIlvain Way."

Look over this month's "Lumber News"—If it is not on your desk, drop us a postal—it will be sent by return mail.

J. GIBSON McILVAIN & CO.

1420 Chestnut Street **Philadelphia, Pa.**

HOLLOWAY HARDWOODS

The following Stock is band-sawn and runs

60% 14′ and 16′

1 car 5/4″ x 11″ & wider 1s & 2s Plain Red Oak

10 cars 4/4″ x 6″ to 12″ 1s & 2s Cottonwood

5 cars 4 4″ x 13″ and wider 1s & 2s Cottonwood

6 cars 4/4″ No. 1 Common Cottonwood

Holloway Hardwood Lumber Co.
20 W. Jackson Blvd. Chicago

Cartier-Holland Lumber Company

TAKE NOTICE!

In the last three issues, we offered high grade End Dried White Maple. We now have left only 50,000′ of 1″, the balance of the stock having all been sold. Better take the matter up with us at once.

We also have the following items for shipment in July.

50,000′ 5/4 High Grade Common & Better Birch.

50,000′ 4/4 High Grade Common & Better Birch.

31,000′ 8/4 No. 1 Common & Better Cross Piled Sap Maple.

YOUR INQUIRIES WILL BE APPRECIATED

Ludington
Michigan

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

BASSWOOD

We Offer for Prompt Shipment

150,000 Feet

Dry 1 x 7 and wider Basswood Firsts and Seconds. Run about 75% clear, the defects are small and the stock is very bright and nice.

ESTIMATED WIDTHS

7 and 8 inch	34%
9 and 10 inch	35%
11 and 12 inch	27%
Wider than 12 inch	4%

ESTIMATED LENGTHS

6 and 8 feet	8%
10 and 12 feet	20%
14 feet	20%
16 feet	49%
Odd lengths	3%

May 25, 1913

COBBS & MITCHELL, Inc.

Sales Department

CADILLAC MICH.

Mitchell Brothers Co.

Dry Stock List

MICHIGAN HARDWOODS

Cadillac, Mich. **June 4, 1913**

1x4 Basswood, No. 1 Common, 11 M.
1x7 & up Basswood, No. 1 Common (Part Dry), 18 M.
4/4 Birch, No. 3 Common, 26 M.
4/4 Birch, No. 3 Common (Part Dry), 16 M.
4/4 Cadillac Gray Elm, 1s & 2s, 94 M.
4/4 Cadillac Gray Elm, No. 1 Common, 76 M.
4/4 Cadillac Gray Elm, No. 2 Common, 66 M.
4/4 Cadillac Gray Elm, No. 3 Common, 65 M.
4/4 Rock Elm, No. 2 Common & Better, 7 M.
8/4 Rock Elm, No. 3 Common, 20 M.
4/4 Soft Maple, No. 2 Common & Better, 9 M.
4/4 White Maple, End Dried (Clear), 14 M.
5/4 White Maple, End Dried (Clear), 3 M.
4/4 Birdseye Maple, 1s & 2s, End Dried, 1½ M.
4/4 White Pine, No. 3 Common, 20 M.

CADILLAC QUALITY

When you want lumber of Cadillac Quality, Lumber which has been manufactured and seasoned properly, and grades which have not been blended to meet price competition—send us your inquiries.

WE SELL ONLY MITCHELL'S MAKE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

100,000 ft. 5/4 1st & 2nds Basswood

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

FLANNER-STEGER LAND & LUMBER CO.

MAPLE AND BIRCH FLOORING

of unexcelled manufacture and quality. Also Manufacturers of Basswood, Birch, Elm, Maple and Hemlock.

SEND US YOUR INQUIRIES

MILLS: BLACKWELL, WISCONSIN

GENERAL SALES OFFICE 1704 STEGER BLDG., CHICAGO, ILL.

Ready for Shipment About June 1st

Ten cars
4/4 No. 1 Common & Better Birch
Five cars
6/4 No. 1 Common & Better Birch
Two cars
8/4 No. 1 Common & Better Birch
Two cars
4/4 No. 2 Common & Better Ash
Five cars
4/4 No. 2 Common S. Elm
Five cars
4/4 No. 3 Common Birch
Two cars
4/4 No. 3 Common S. Elm
Five cars
4/4 No. 2 Com. & Better Basswood

Above cut from virgin timber. Grade and manufacture are first class.

Mears - Slayton Lumber Co.
1237 Belmont Ave. Chicago, Ill.

15,000,000 FEET ALWAYS ON HAND



THE PRICE-BUYER'S EAR

is reached by only one line of argument, but Quality saves waste and swells his dividends.

WE SPECIALIZE ON QUALITY

From our regular stock of Southern Hardwoods we make a special offer of the following

"WISLUMBCO STANDARDS"

50,000 ft. 4 4x18" and wider No. 1 and Panel Cottonwood.
60,000 ft. 4 4 Shop Cypress.
50,000 ft. 4/4 No. 1 Common Cypress.
75,000 ft. 4 4x13 to 17" Box Board Tupelo.
90,000 ft. 4/4 1st and 2nd Tupelo.
60,000 ft. 4 4 1st and 2nd Red Gum.
80,000 ft. 4 4 No. 1 Common Red Gum.
75,000 ft. 4 4x13" and wider 1st and 2nd Sap Gum.

SEND US YOUR INQUIRIES FOR SOUTHERN HARDWOODS

WISCONSIN LUMBER CO.
CHICAGO

Band Mills
HUTTIG, ARK.
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Both Ends and the Middle

HARDWOOD RECORD reaches most everybody who produces markets and consumes Hardwoods.

Nothing But Hardwoods

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

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VENEERED PANELS
ALL WOODS
SEND FOR STOCK LIST
MAHOGANY LUMBER
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Estabrook-Skeele Lumber Co.
MANUFACTURERS AND DEALERS IN
Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods
In the Market for Round Lots of Hardwood
WRITE US BEFORE SELLING
Fisher Building, - - - CHICAGO
'PHONE HARRISON 1984

SELECTED OAK

You require veneer of a special character but—

You haven't the facilities for selecting just what you want.

Our business depends on our knowing just what you want and just where to get it.

We have just selected 200,000 ft. of highly figured, 1-20 inch, quarter-sawed white oak for piano and furniture trade.

You can inspect it at our warehouse at your convenience.

VENEER MANUFACTURERS COMPANY
CHICAGO ILLINOIS

EVERYTHING TO A DOOR

The veneers for stiles and rails, 1/8", 3/16" and 1/4".

The veneers for the panel faces, 1/20", 1/16" and 1/8". In Rotary Cut Oak, Quartered Oak, Birch, Yellow Pine, Mahogany, etc. And in Gum, Poplar, Basswood, etc., for centers.

Also 5/16" and 3/8" 3-ply panels, all sizes, in Oak, Birch, Yellow Pine, and Mahogany.

Send us your inquiries

HUDDLESTON-MARSH LUMBER CO.
2254 Lumber Street, Chicago

***Going up*—Hardwood Timber**

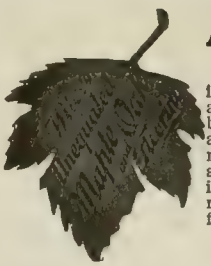
We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTHWEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address
John C. Spry
Room 1003 Harris Trust Bldg., Chicago, Illinois



A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company
22nd and Throop Sts. CHICAGO, ILL.

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO.

KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK

OUR SPECIALTY

MANUFACTURERS OF

QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER

BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

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J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS

HARDWOODS AND PINE

POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:
Bank and McLean Ave., Cincinnati — I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:

WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT — BASSWOOD

POPLAR — WHITE PINE

Always carry large well assorted stock of all kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR, OAK, CHESTNUT, WHITE AND YELLOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

"THE VERY BEST"

Red Birch

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

Kimball & Kopcke

Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

CINCINNATI
THE GATEWAY OF THE SOUTH

Eventually—Why Not Now?

Eventually you will buy a carload of our Plain Oak and Quartered Oak or our Poplar—WHY NOT BUY IT NOW?

If our salesman does not call on you, send us a list of your requirements, and LET US quote you.

The Mowbray & Robinson Co., Cincinnati Ohio

Manufacturers **Plain and Quartered Oak and Poplar Band Sawed Stock**

Mills QUICKSAND, KY. WEST IRVINE, KY — SOFT EASTERN KENTUCKY OAK

W. E. HEYSER, President WEAVER HASS, V. President
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The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Grade West Virginia and Southern Hardwoods in stock at all times.

Shipments made direct from our own yards and mills in straight or mixed cars.

SEND US YOUR INQUIRIES

The Maley, Thompson & Moffett Co.

Veneers, Mahogany and Hardwood Lumber

Largest Stocks — Best Selections

CINCINNATI, OHIO

L. W. RADINA & CO.

DEALERS IN

POPLAR AND HARDWOODS

CINCINNATI : : OHIO

BENNETT & WITTE

10 cars 4/4 No. 1 Common Plain Red Oak
5 cars 4/4 No. 1 Common Plain White Oak
5 cars 5/8 1sts and 2ds Sap Gum.
10 cars 3/4 1sts and 2ds Sap Gum
20 cars 4/4 1sts and 2ds Red Gum.
10 cars 4/4 No. 1 Common Red Gum.
1 car 3" Plain White Oak, 1sts and 2ds.

Main Office CINCINNATI, OHIO

SOUTHERN OFFICE, MEMPHIS, TENN.
EXPORT OFFICE, NEW ORLEANS, LA.

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD CHICAGO

LAMB-FISH LUMBER CO.

MEMBER HARDWOOD MANUFACTURERS ASSOCIATION OF THE U.S. — A Guarantee of a Square Deal in both Grade and Measurement

Band Mill and General Offices

CHARLESTON, MISS.

THE LARGEST HARDWOOD MILL IN THE WORLD—ANNUAL CAPACITY 40,000,000

We Produce Kraetzer-cured LUMBER

STOCK LIST—Dry Lumber on Hand June 1st, 1913

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	12/4	16/4
FAS. Qrtd. White Oak		25,000					6,000			
FAS. Qrtd. White Oak 10" up					12,000					
No. 1 Com. Qrtd. White Oak				20,000	150,000					
No. 2 Com. Qrtd. White Oak					12,000					
FAS. Plain White Oak					50,000		20,000			2,000
No. 1 C. Plain White Oak			25,000	20,000	200,000	12,000	20,000			
FAS. Plain White Oak, 10" up				4,000						
FAS. Plain Red Oak					100,000			20,000		1,000
No. 1 C. Plain Red Oak			20,000	15,000	130,000			1,000		
C. & B. Qrtd. Red Gum					25,000					
FAS. Circassian Red Gum	25,000	25,000	12,000	30,000	30,000	3,000	4,000	6,000		
FAS. Plain Red Gum	500,000	400,000	40,000	400,000	600,000	100,000	75,000	60,000	3,000	
No. 1 C. Plain Red Gum				75,000	300,000	60,000				
FAS. Sap Gum, 13"-16"					60,000					
FAS. Sap Gum, 18" up					15,000					
FAS. Sap Gum, 6" up	30,000									
No. 1 Com. Sap Gum, 4" up					250,000					
No. 2 Com. Sap Gum, 3" up	80,000	50,000								
S. & B. Cypress					100,000		200,000	10,000		
C. & B. Tupelo					100,000					

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50', 14' AND 16' LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS AND BRIDGE PLANKS. FACILITIES FOR KILN DRYING, DRESSING AND KRAETZER CURING.

GOOD GRADES "STEARNS QUALITY LUDINGTON" PROMPT SERVICE

HARDWOOD SPECIALISTS

The care we give our lumber plays an important part in sustaining the

STEARNS QUALITY

The problem of drying thick lumber thoroughly without checking excessively has given manufacturers considerable trouble, but we have solved the problem.
We have a fine assortment of perfectly dried

LOWER PENINSULA STOCK



PROTECTION AGAINST CHECKING

SOFT GRAY ELM

In Full or Mixed Carloads:

60 M ft. 4/4 1s & 2s.
40 M ft. 6/4 1s & 2s.
20 M ft. 8/4 1s & 2s.
15 M ft. 10/4 1s & 2s.
35 M ft. 12/4 1s & 2s.
10 M ft. 16/4 1s & 2s.
80 M ft. 4/4 No. 1 Common.
65 M ft. 6/4 No. 1 Common.
25 M ft. 8/4 No. 1 Common.
12 M ft. 10/4 No. 1 Common.
16 M ft. 12/4 No. 1 Common.
7 M ft. 16/4 No. 1 Common.

The STEARNS SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

Our Specialties:

Cottonwood—Red and Sap Gum | **Oak** (Plain and Quartered Red and White) | **Three Ply Red Gum Panels**

A Few Items We Want To Move

10 cars 4/4" x 9" to 12" Cottonwood Box Boards.
5 cars 4/4" x 13" to 17" Cottonwood Box Boards.
10 cars 4/4" x 13" to 17" 1sts & 2nds Cottonwood.
5 cars 4/4" x 18" to 21" 1sts & 2nds Cottonwood.
3 cars 5/4" x 13" to 17" 1sts & 2nds Cottonwood.
1 car 6/4" x 6" & Up 1sts & 2nds Cottonwood.
3 cars 5/8" x 6" & Up 1sts & 2nds Sap Gum.
4 cars 4/4" x 13" to 15" 1sts & 2nds Sap Gum.
6 cars 4/4" x 6" & Up 1sts & 2nds Red Gum.
2 cars 5/4" x 4" & Up No. 1 Com. Red Gum.
1 car 6/4" x 4" & Up No. 1 Com. Red Gum.
2 cars 8/4" x 6" & Up 1sts & 2nds Plain White Oak.

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY

Memphis — **BOX SHOOKS ann VENEERS** — **Tenn.**

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Cherokee Lumber Co.

For the next thirty days we want to move Quartered White Oak and Chestnut and would appreciate your inquiries for attractive prices.

NASHVILLE, TENN.

SECURE BETTER PRICES

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

ASK US ABOUT IT

We will name very attractive prices on a few cars of each of the following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4/4 and 8/4 Sap Poplar.
1¼", 1½" and 2½" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23" and 24" and up.
4/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.



OTIS A. FELGER
Secy. and Treas.



JAMES F. McSWEYN
Pres. and Mgr.



GEORGE McSWEYN
Vice Pres.

LET US GET BETTER ACQUAINTED FOR
MUTUAL PLEASURE AND PROFIT

MEMPHIS BAND MILL COMPANY

MAKERS OF HIGH GRADE LUMBER

MEMPHIS, TENN.

QUALITY

We have purchased the plant of the Memphis Saw Mill Company and hereby announce the organization of the Memphis Band Mill Company. We will continue the manufacture of southern hardwoods and Cypress. We have a capacity of twelve million feet per year. O equipment is the best, we will give particular attention to QUALITY, especially to developing the figure in quartered Oak and Gum. We invite you to come and see.

Ask us for a Delivered Price

On account of the unique geographical position of Louisville, and the excellent line of railroad rates which are enjoyed by lumber manufacturers and dealers here, the members of this organization are able to quote delivered prices that are exceedingly satisfactory to the buyer, whether wholesaler or consumer.

It will save time and labor on your part, and will be no trouble to us, to quote guaranteed delivered prices on any item of hardwood stock for which you happen to be in the market. This will enable you to figure your expense for material, laid down in your yard or factory, or that of your customer, without difficulty.

Compare our quotations with those you receive from other sources, and you will find that in most cases we will be able to save you money. In addition to direct shipments from Louisville, hardwood headquarters, our members have mills located advantageously with reference to various consuming centers, so that shipments can be arranged from points best suited to your requirements.

You know what Hardwood Club service is. If not, ask us to send you that car you are short on—right now.

The Louisville Hardwood Club

EDWARD L. DAVIS LUMBER CO.
THE LOUISVILLE VENEER MILLS
NORMAN LUMBER CO.
Mills and Sales Office: Holly Ridge, La.
LOUISVILLE POINT LUMBER CO.
BOOKER-CECIL CO.
OHIO RIVER SAWMILL CO.
W. P. BROWN & SONS LUMBER CO.

THE EAST

BOSTON NEW YORK PHILADELPHIA

WM. WHITMER & SONS
INCORPORATED

Manufacturers and Wholesalers of All Kinds of

"If Anybody Can, We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg. PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building PITTSBURG, PA.

WISTAR, UNDERHILL & NIXON
REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.

QUARTERED WHITE OAK

NICE FLAKY STUFF

WM. E. LITCHFIELD
MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

We Know How to fill your orders for all kinds of HARDWOODS, WHITE PINE, YELLOW PINE, SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.
Give us a trial.

THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

JONES HARDWOOD COMPANY
33 Broad Street, Boston, Mass.

Birch, Maple and Beech

For Quick Shipment

1 car 4/4 1s and 2s Chestnut.
2 cars 4/4 No. 1 Common Chestnut.
1 car 4/4 1s and 2s Red Oak, 16" and up wide.
1 car 4/4 Common and Better Quarter Sawed Red Oak.

Inquiries Promptly Answered

DANIEL B. CURLL, REAL ESTATE TRUST BLDG., PHILADELPHIA, PENNA.

CHARLES HOLYOKE
141 MILK STREET, BOSTON, MASS.

HARDWOODS

BEECHER & BARR

OAK CHESTNUT POPLAR

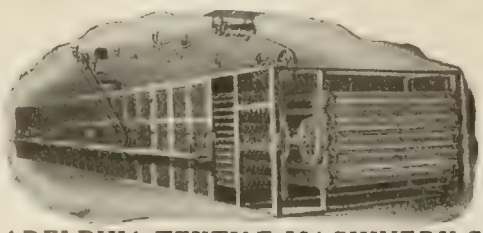
WHITE PINE, YELLOW PINE AND HEMLOCK
INTERIOR TRIM. HARDWOOD FLOORING.

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Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-Working Machinery, on the 10th and 25th of each Month, by

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Review and Outlook

General Market Conditions

THE GENERAL CONDITION of the lumber business was pretty clearly pointed out at the recent meeting of the National Lumber Manufacturers' Association at Kansas City, where one session was devoted to the reports of the various affiliated associations representing the lumber trade of the entire country and making up the membership of that organization. Considerable satisfaction can be derived from reports of the representatives of the various associations, no one of which was in any way pessimistic. It is true that representatives of southern pine manufacturers did not hesitate in stating that yellow pine prices are not holding uniformly—in fact that yellow pine values are more or less uncertain. But this condition has been noted so frequently the last few years that it should cause no anxiety. The yellow pine business, made up as it is of large operators, a great many of whom are heavily bonded, does not offer a criterion from which to judge of conditions in other branches of the lumber business. The necessity for meeting current obligations in the form of interest on bonds makes it imperative that yellow pine stocks be moved quickly at all times.

There was, however, an easily noticeable undercurrent indicating that business is not active in any part of the country, although this inactivity was in practically every case attributed to temporary causes in addition to the fact that this slump is usually noted at this season of the year. It is not at all improbable that, as regards the hardwood situation, demand has been somewhat held up pending the adjustment of the grading question which has commanded the attention of producing and consuming elements of the hardwood business for a couple of months back. The conclusion of this question should undoubtedly result in some little stimulation of business. The biggest factor in the hardwood business as well as in all other branches of the lumber business and various other industries of the country which tends to a laxity of trade is, as has been the case for some months, the proceedings of Congress at Washington. In addition, there is an unquestioned tightness of money, although this feature is not so serious as it has been. On the whole, business in general could hardly expect any general resumption of activity until the various national questions of importance have been satisfactorily adjusted.

Speaking intimately of hardwood conditions, the various consuming elements are about on a par as far as activity of inquiry is concerned. Railroads are in many cases planning extensive improvements and additions to rolling stock. Building operations are in satisfactory shape in most of the large centers of the country. The automobile trade is exhibiting quite a little activity, but inasmuch as a number of the large auto manufacturers have adopted the metal bodies, this factor is not of so much importance as it was several years ago.

The same relative condition is manifest regarding the various species and grades of wood offered by hardwood producers.

Logging with Motor Truck

THE PICTURE ON THE FRONT COVER of this issue of HARDWOOD RECORD represents the latest evolution in log hauling. The truck made its appearance in the hardwood region of northern Ohio about a year ago and has made good. It is built by the White Company of Cleveland. No claim is made for it that it will or can take the place of the logging locomotive and railroad, but its particular field of usefulness lies in the woodlot regions where there is not enough timber in any one locality to justify the building of a railroad. It is equipped to do more than simply carry loads. It is a skidder, and can take the place of a donkey engine in dragging logs, by means of a drum, out of ravines and swamps. It loads and unloads by its own power, and does the work quickly. It transfers its load to the steam cars when it reaches the railroad station. The rear wheels have a twenty-two inch tread and are equipped with corrugated surfaces like the wheels of a traction engine. The speed is from seven to ten miles an hour, and the normal load is five tons, or about 2,000 feet of logs; but it occasionally carries six tons. It keeps the road at all seasons of the year, and is not put out of commission by an ordinary depth of snow or a moderate amount of mud. While it may be taken over rough roads, it is not designed to displace logging wheels among stumps, ruts, and logs. The most efficient work is obtained where roads are fairly good; but it can successfully drag logs out of ravines several hundred feet deep.

The Conventions

THE TWO GREAT CONVENTIONS which occurred last week, that of the National Lumber Manufacturers' Association at Kansas City, on June 3 and 4, and of the National Hardwood Lumber Association at Chicago, on June 5 and 6, marked a new era in association benefit as realized from the convention floor. While an association might be highly efficient in the administration of its duties from the secretary's office, it is essential to ultimate success that a program of sufficient interest be developed at each annual convention to command the close attention of the membership meeting at this time. The two conventions referred to come very well within these specifications.

The convention at Kansas City was a veritable whirlwind of interest. These meetings are always characterized by the highest type of addresses, and under the able leadership of Secretary

J. E. Rhodes an aggregation of speakers, such as has never been equaled by the National Lumber Manufacturers' Association, was gotten together. As a result the delegates unquestionably left Kansas City feeling the inspiration caused by the many words of wisdom delivered at the sessions at that place. The addresses included talks by experts on workmen's compensation, Mississippi river regulations, forestry and conservation, timberland sales, nation-wide economic questions, and various other absorbing topics. The resolutions presented and adopted proved that the association was willing to make every effort within its power to secure changes and reforms for the direct good of the whole of the lumber manufacturing contingent of the United States, as well as business in general.

The meeting of the National Hardwood Lumber Association at Chicago developed the fact that the membership of that organization is held together by a distinct spirit of harmony and broad-mindedness. The much-talked of proposal of radically changing the grading rules was worked out to a successful conclusion without friction, by compromises on the part of the various factions interested. Here also the attendants were permitted to listen to addresses by men who know, on many subjects of vital interest. Most notable among these was an address by Harry A. Wheeler, president of the Chamber of Commerce of the United States, whose remarks were listened to with an absorption which was a just tribute to the man delivering them. Altogether the two conventions will go down in history as of imposing interest and benefit to the lumber trade of the country.

A Remarkable Manifestation

THAT THE BUSINESS INTERESTS of the country are in imperative need of a closer association with the politics of the city, state and nation has been the contention of various men in a position to closely observe the economic transition that has been going on in this country for several years. These contentions have been in the past largely theoretical in that they merely pointed out the condition and did not in many cases suggest a remedy. The two big lumber conventions in the past week, however, brought out a world of suggestions along these lines, which indicates that the business element of the country is awakening to a realization of the conditions which it must face in order to make secure the prosperity with which our nation has been blessed for so long, and which has made it the great nation which it now is.

The speakers at these conventions demonstrated the fact that some of the best minds in the country have concentrated on this question, and have actually worked out ways and means of approaching the condition on a businesslike basis.

The address of A. B. Cruikshank, a prominent attorney of New York City, as delivered at Kansas City before the National Lumber Manufacturers' Association, was remarkable for its forcefulness and the clearness with which it laid the condition before the listeners. According to that speaker the great drawback of our government is the fact that it is not run, as a rule, by business men, and that the legislators are not fully competent to pass and administer legislation to fully take care of the requirements of modern business. The suggestion was a nation-wide organization of the business element of the country with the idea of keeping closely in touch with national legislation in order to effect measures that are absolutely necessary for the successful continuation of business in this country.

The tenor of the talks of other speakers before that convention was very similar, and on the whole pointed out the necessity for business men changing present condition from, as Mr. Cruikshank suggested, "the government of business" to "the business of government."

The same thought was followed out at the meeting at Chicago of the National Hardwood Lumber Association, which thought was exemplified in a talk delivered by Harry A. Wheeler. Mr. Wheeler said that there are nine problems which must be faced by the nation, and must be faced soon and squarely and emphatically. These problems are divided under three heads: Social, economic, and industrial, and really typify the work of the association of which Mr. Wheeler is president, namely, the Chamber of Commerce of the United States of America.

The object of this editorial is to call the attention of the lumber business, as the third largest industry of the country, to the enormous importance of the work suggested by the speakers above noted, and generally suggest that the lumber element as a unit render its earnest and hearty support to the solution of these problems through a sincere co-operation in any method proposed for this purpose, one of which is the Chamber of Commerce of the United States. The proceedings of this organization should be closely followed and its purpose heartily endorsed.

The organization of business men, as suggested by Mr. Cruikshank, might, it appears, be very easily consummated through the National Chamber of Commerce if that body has sufficient moral support to successfully carry on this work.

Mahogany Prices Not All Velvet

THE RAPID INCREASE in the selling price of mahogany in various markets of the country might be considered by those not conversant with the various conditions which affect manufacturers of mahogany as being merely an attempt on the part of those manufacturers to increase their profits from operation at a bound. The opinions of prominent manufacturers, however, indicate that such advances as have been noted have been absolutely necessary and have been effected entirely by two factors operating in the opposite direction,—namely, increased cost of logs and increased transportation charges across the ocean. The first condition is the result of various causes operating in different mahogany producing sections of the world, but is an actual, concrete condition which apparently has no immediate remedy.

The second condition probably is the result of a natural increase in export business to various large countries of the world and the fact that ocean transportation companies have not been able to keep pace with this increased volume of business in the matter of providing sufficient steamers to acommodate that trade. The most active factor which has had its effect in the last year or so has been the increasing interest in the possible trade to be derived from the opening of the Panama canal. The interest in the canal has greatly increased the demand for shipping bottoms and has resulted in a remarkable increase in ocean freight rates. One large mahogany lumber manufacturer in the South makes the statement that recent freight rate advances, as announced by steamship companies, directly increase the expense of the manufacture of mahogany lumber by about $5.00 a thousand feet. This, according to the manager of the company referred to, had to be met by an increase in the price of mahogany.

It is not probable that, aside from any temporary fluctuations in the mahogany market, anything will arise that will retard the advance or reduce the selling price of mahogany in the near future. It is quite likely that a large number of new steamers will be constructed to take care of the Panama trade, but this increase in shipping accommodations will not have any effect in the immediate future. The statement on the part of various large steamship lines crossing the Atlantic that they have made practically no profit in the past year and must necessarily increase rates during the next year would not indicate that there will be any relief for some time at least.

A Blow at the Commerce Court

ALMOST SIMULTANEOUSLY WITH THE PASSAGE of a resolution by the National Lumber Manufacturers' Association assembled in convention at Kansas City last week, endorsing the Federal Commerce Court, comes the news that Representative Sims of Tennessee has introduced his bill in Congress at Washington, D. C., providing for the abolition of that body. The bill was referred to the House Committee on Interstate and Foreign Commerce. Inasmuch as the committee has not been re-organized and possibly will not be re-organized during the extra session of Congress, the Commerce court is placed in a peculiar situation.

The appropriation for the court continues only until July 1 of

this year. Hence, unless special provision is made, there will be no provision for paying the salaries of the clerks and for meeting the rent for the quarters of the court. Nevertheless, the court will still be in existence technically at least as no direct act has been passed by Congress returning to the district courts the jurisdiction of the Commerce court. This will effectively block all legislation of railroad disputes, and no court will have authority to review the law involved in any opinion of the Interstate Commerce Commission.

Possibly the hesitancy on the part of President Wilson about committing himself on the question is due to the fact that he recognizes that his endorsement of the Commerce court would make it extremely probable that the advocates of similar specialized courts would immediately endeavor to secure the inauguration of such tribunals. It is a fact that certain Democratic members of the Senate are in favor of reducing the membership of the court to three judges who will have the power to review the law involved in both negative and affirmative orders of the Interstate Commerce Commission. It is believed that such a reorganization bill would pass the House because of the change of sentiment toward the court.

Car Statistics

THE REGULAR BULLETIN of the American Railway Association, showing car surpluses and shortages on May 31, gives a comparison with the statistics for previous dates.

According to the bulletin the total surpluses on May 31, 1913, aggregated 60,291 cars as against surpluses on May 15 of 61,269 cars, and surpluses on June 6, 1912, of 89,208 cars. The total shortage on May 31, 1913, was 9,383 cars, and on May 15 was 10,975 cars as compared with figures for June 6, 1912, when the shortage was 2,822 cars. The natural deduction from these figures is that freight shipments, and hence business, is more active at this period than it was a year ago.

Although these figures do not indicate any striking shortage of cars, there are grounds for believing that as far as the lumber business goes certain sections of the country are experiencing some inconvenience from their inability to secure sufficient number of cars for shipments. This is particularly true of certain parts of the South, but has not been noted at northern points.

An Indication of Interest

HARDWOOD RECORD HAS MADE EVERY EFFORT to build up a publication which would serve not merely as a chronicle of minor news events, and a record of association meetings, but would provide a valuable and authentic source of information on every topic connected with the hardwood lumber and veneer trade both from the viewpoint of the manufacturer and the consumer. It has spared no expense or effort in this direction, and judging from the comments which it receives at no infrequent intervals, its efforts have been rewarded with at least partial success.

The idea of this editorial is not to work ourselves up into a high state of inflation of the cranium, but is merely for the purpose of pointing out a feature of HARDWOOD RECORD which is interesting from at least two viewpoints. The feature in mind is "The Mail Bag" section. In the first place the development of this section is of particular interest to the publishers of HARDWOOD RECORD because it is really the only means of ascertaining as to whether or not the policy carried out is meeting with approval. In other words, if no comment is received on articles appearing in HARDWOOD RECORD, the indication is that those articles are not meeting with approval. Hence, inasmuch as "The Mail Bag" section is growing rather remarkably, it gives to the publishers of HARDWOOD RECORD a feeling of considerable satisfaction.

The second consideration is that readers of HARDWOOD RECORD should utilize this "Mail Bag" section as a means of obtaining information on various subjects pertaining to the hardwood trade in its many ramifications, and should also be able to buy or sell various unusual commodities of interest to the consuming trade. Hardly an issue passes that does not contain at least a full page of "Mail Bag," and usually this section runs from one-and-a-half to two pages. It is made up entirely of live interesting inquiries and information, and its perusal each issue should be of value to every uptodate manufacturer and consumer of hardwood lumber and the products of the hardwood forests.

Transportation Questions Analyzed

IN AN EARLY ISSUE of HARDWOOD RECORD will begin the publication of a series of articles analyzing the broad question of transportation, covering every phase of this question, including the means of transportation, shipping items, rate and permanency of such means. The average shipper, aside from knowledge of freight rates from one point to another as may be possessed by his traffic department, is entirely ignorant of many questions affecting transportation from different directions.

The articles referred to are written after a careful and expert analysis of the question, and should command the earnest attention of the sincerely up-to-date element of the lumber trade. The first of this series will appear in the issue of June 25.

What the Underwood Tariff Law Means

THE FOLLOWING ARE SOME CONCRETE FIGURES published by the St. Paul Dispatch of St. Paul, Minn., showing exactly what would result theoretically in dollars and cents from the passage of the Underwood Tariff Bill:

UNDER THE PAYNE LAW, 1912

Imports.	Revenue.
$759,209,915	$304,597,035
Under the Underwood law for a period of twelve months (estimated):	
$1,000,999,000	266,701,000
Loss in revenue under new law (estimated)	$ 37,896,035
Government revenue from all sources, 1912	938,522,482
Expenditures, 1912	901,297,979
Surplus	$ 37,224,503
Estimated expenditures, first year, under Underwood law	994,790,000
Estimated revenue, first year, under Underwood law	926,000,000
Deficit	$68,790,000
Earning power of income tax, first year	70,125,000
Estimated surplus, first year, under new law	1,335,000

Exports and Imports

THE April exports and imports of forest products, as compiled by the Department of Commerce, are shown as follows: Exports, round timbers, 18,401,000 feet; hewed and sawed timber, 49,546,000 feet; lumber, 195,763,000 feet; shingles, 11,695,000; box and other shooks, 1,218,234; staves, 5,596,476; heading, $25,191; doors, sash, and blinds, $107,066; furniture, $550,945; empty barrels, $25,111; house finishings, $85,355; woodenware, $59,160; wood pulp, $36,821; all other manufactures of wood, $603,026. Following are imports: Briar and ivy root, $24,090; cabinet woods, $417,412; round timber, 13,523,000; pulpwood, 49,100 cords; rattans and reeds, $61,549; lumber, 59,962,000 feet; lath, 29,056,000; shingles, 36,134,000; pulp, 69,582,775 pounds.

Reparation on Hardwood Shipments

THE Interstate Commerce Commission recently decided the claim made by the Michigan Hardwood Manufacturers' Association against the Transcontinental Freight Bureau, for refund of freight paid on lumber shipped to Pacific coast points from the southern peninsula of Michigan, in excess of a rate of seventy-five cents a hundred. Up to January 1, 1905, that was the rate. On that date it was advanced to eighty-five cents, which was equivalent to an advance of about four dollars a thousand feet. The commission ruled that eighty cents is a reasonable rate and ordered reparation of all in excess of that; but, this does not apply to shipments prior to August 1, 1908, because the statute of limitation bars all earlier claims.

Pert, Pertinent and Impertinent

A DIFFERENCE OF OPINION



Jobber: The right way to inspect hardwoods is from the poorer face or reverse side.
Manufacturer: The only just way to inspect hardwoods is from the face or best side of the board, the side that is exposed in use.
Consumer: Fight it out! All I want is when I invest a dollar in hardwood to get a dollar's worth of cutting value.

Certainly Not

"I saw a Cubist painting of a man on horse back yesterday."

"How did you know it was a man on horse back?"

"Why, anybody could see that."

"Then it was not a Cubist painting."—*Houston Post.*

Knew His Ground

"You say this man is no chicken stealer?" inquired the judge.

"Yassuh," replied Rastus.

"What do you know about the facts in this case?"

"I isn' s'posed to know nuffin' 'bout de facts in de case. I is expert witness foh de defens'."—*Washington Star.*

Letting Well Enough Alone

"I am going to make that boy stop whistling?" said the nervous man.

Don't. If you knew the words of that song you'd be thankful to let him whistle it instead of singing it."—*Washington Star.*

Never strike a man when he's down—for a loan.

Improving Product of the Small Mill

It is pretty generally charged, and is too often true, that the small sawmill does not do its work well; that lumber manufactured by it will not pass muster alongside lumber manufactured by the larger mills, and especially the modern band sawmills. So strong is this impression and so often do the small mills give excuse for it that it is a pretty hard proposition for a man to start out marketing the product of a small mill or a series of small mills with the idea of getting the same price for it that is paid for the lumber product of the larger mills. Moreover, it is held that it is impractical for the small mill, moving about from place to place, to be maintained in such condition as to do the best class of manufacturing.

Who is there, though, who can point out specifically the reasons why a small mill cannot manufacture just as good lumber as the larger mill? It is easy enough to explain how the small mill may have more difficulty in handling logs of larger size than the average circular saw of the mill will reach, but that is aside from the question of quality in manufacturing. The writer has in mind several instances where small mills have actually made records of superiority in manufacturing that might well be envied by some of the larger ones.

One case specifically in mind was that of a water mill having a capacity ranging from 1,000 to 5,000 feet a day. This mill made quite a feature of wagon material, including axles, tongues, bolsters and poles. The work of sawing was so carefully done and the stock was so well cared for that it found favor everywhere, and some of the larger mills in the same community bought stock from the smaller mill for their own use.

Another instance was that of a small mill of the semi-portable class having a 9x12 self-contained steam engine and a ten-foot tubular boiler. The entire mill could be taken up and moved from place to place in from one to two weeks' time, and it seemingly did not differ materially from hundreds of other small mills. The man owning and operating it, however, took pride in his ability as a sawyer and he was such a crank on smooth, clean-cutting saws that he would stop and go over his saw instantly when any prominent saw marks showed on the product. This man made lumber on which one could hardly find the saw marks and which, insofar as manufacturing was concerned, would grade with the best product of the best band mills.

These instances are cited to show that there is really nothing impossible or impractical about doing good work with a small sawmill. There is really but little excuse for poor manufacturing even in a small mill, and the faults that do show up are more those of neglect and carelessness than anything else.

What is there about a small mill that should prevent it from making just as perfect lumber as a large one? There is nothing that differs mechanically from the equipment of the larger mills. It consists of a carriage track with a carriage mounted on it, on which are head blocks to carry the logs, and of a saw to do the cutting, with the necessary feeding gear to run the carriage back and forth. These are essentials just the same in the large mill as in the small mill, and also in each case it is essential to have them leveled, plumbed and in true alignment. This is no more impossible with the small mill than with the large one.

One difference sometimes is that the small mill may only have two head blocks on the carriage, whereas the large mill has three or four. Sometimes, too, the larger mill has a better equipment of dogs, so that the logs are held more firmly and the extra knees on the blocks prevent springing. These extra blocks can be had on the small mill, though, just as well as on the large one and the additional cost is only a nominal one; indeed, some of the better small mills already have them, and also have splendid dogs with which to hold their logs in place.

Perhaps the most important difference found in a comparative analysis of the work of small mills and large ones is to be found in the fact that on the larger mills, whether they are band mills or circular mills, the saws are taken off when they are dull and taken to a filing room, where an expert filer does the filing. In the small mill, when the noon whistle blows the sawyer eats a hasty bite and then jumps astraddle of the back of his saw with a swage and file and makes a rush job of putting it in order for the afternoon run, repeating this performance again at the end of the day's work. One of the results of this method is that the saws are too often poorly fitted; they have long corners and short corners, thus marking up the lumber so that it takes too much to dress it down to a smooth face. The poor work in swaging makes the saw run warm and go snaking in and out of the logs so that it produces poorly manufactured lumber.

This is perhaps the crux of the whole matter, in the difference between the work of the small mill and the larger one. There is not enough time and money spent to keep the saws in proper order. If the man operating the small mill will equip a filing room, carry a stock of three or four saws, keep them properly hammered to stand up under their work, and take pains in filing them as they should be, instead of doing a hasty job astraddle of one on the mandrel, the saws will stand up and do just as good work as can be done in a larger mill.

While this matter of keeping the saws in proper order is perhaps the most important point in the matter of improving the product of the small mill, it is by no means the only one. The carriage track must be kept level, the mandrel in proper alignment to the carriage track, and everything in the same first-class order that prevails in the larger plants. There is nothing impossible about it all; nothing very difficult. Moreover, there is really no lack of skill responsible—it is simply a lack of care and thoughtfulness. The man who knows enough to file a saw knows when that saw is running right, and what shape the mandrel and carriage should be kept in. So it is not lack of knowledge—it is really lack of care—and the man with the small mill who cares enough and will take the trouble can, by close attention to all of the details, make just as good lumber as the mill with the big band saw.

J. C. T.

Proceedings of American Wood Preservers

The American Wood Preservers' Association has recently published a book of five hundred pages, containing the proceedings of the annual meeting held in Chicago last January. The wood preservers are doing a particular work. They are saving timber that has already been grown, rather than exerting their energies to grow more, though they are not insensible to the needs of practical forestry. They are not making two sticks grow where one grew before, but they are making the one stick go twice as far as it used to go. They are stopping one of the most wasteful leaks in the wood industry—decay. The field in which they may carry on their work is wide. The annual cut of crossties in the United states is equivalent to about five billion feet of lumber; and if, by preservative treatment, the period of service of these ties can be doubled, it means a saving of between two and three billion feet of wood a year in that one item alone. Half as much timber goes into fence posts every year, and preservation will save a billion feet annually in that commodity. Similar savings are practicable in poles, paving blocks, piling, and mine timbers. Great saving is possible with nearly all out-door timbers and those used in damp situations where decay is prompt to attack and quick in destroying. The fact is often lost sight of that the annual enormous bill of forest products which the people must pay for is largely to take the place of material which rotted out instead of wearing out. A large part of this decay is preventable by preservative treatment. There is no line of work more promising for the advocates of conservation. It is not the whole field, but it is a very respectable part of it.



R. H. DOWNMAN, NEW ORLEANS, LA., NEWLY-ELECTED PRESIDENT.



E. G. GRIGGS, TACOMA, WASH., RETIRING PRESIDENT.



W. E. DELANEY, CINCINNATI, O., VICE-PRESIDENT.

National Manufacturers' Meet

Editor's Note

The following is a summarized report of the business sessions of the eleventh annual meeting of the National Lumber Manufacturers' Association. Except for the reports of the president and secretary, no papers are run in full in this general report. All addresses of particular interest to the hardwood trade, which are not summarized herein, are run as special articles in this or subsequent issues.

The eleventh annual convention of the National Lumber Manufacturers' Association was held at the Hotel Baltimore, Kansas City, Mo., on Tuesday and Wednesday, June 3 and 4. In spite of the rather torrid weather which prevailed, the meeting brought out a satisfactory representation of lumbermen from all parts of the country as delegates from the various affiliated associations.

The meeting was opened with an invocation by the Rev. George H. Combs, of Kansas City, Mo.

Following the invocation, Capt. J. B. White, of the Missouri Lumber & Land Exchange, Kansas City, was introduced by President E. G. Griggs. Mr. White delivered an address of welcome, speaking humorously. He introduced his talk with a story of his acquisition of the title of "captain." He said that when he came to Missouri, thirty-five years ago, he built a house in the woods and equipped it with two chimneys. At the same time a Kentuckian, bearing the title usually carried by the sons of the "Blue Grass" state (colonel), built a house in the same section and erected three chimneys. With this visible evidence of superiority the "colonel" patronizingly adopted Mr. White and favored him by calling him "captain," the next lowest ranking title, which has clung to him tenaciously ever since.

Speaking seriously, the speaker gave the visiting lumbermen every reason to feel sure of their welcome to Kansas City.

In his response on behalf of the association, William Irvine, of Chippewa Falls, Wis., said that Kansas City, as a great yellow pine center, seemed a logical meeting place for the association. He said that while forty per cent of the membership of the association is made up of yellow pine manufacturers, he had never seen any tendency on the part of that element to dominate the association in its meetings or administration.

President Edward G. Griggs, of the St. Paul and Tacoma Lumber Company, Tacoma, Wash., delivered a highly interesting and valuable address as follows:

Address of President

As your retiring president, I wish to congratulate the associations affiliated with the National Lumber Manufacturers' Association in keeping this organization intact and very much alive for an even dozen years.

The greatest shock to me since my incumbency was the apparent ease with which this or that affiliated association, through its board or officers, would tender its resignation without regard to financial burdens assumed or obligations incurred, closing, if you please, its chapter with some assertion of fancied wrongs or future improbabilities, and then, after due apologies, withdraw it.

No association board can accomplish results commensurate with responsibility assumed if it is not backed by a supporting membership that will stick through at least high water; nor can any management be secured that will be permanent unless this great industry, as represented in this one big united association, will permanently endow it.

We have existed long enough not to be required to apologize for our existence, and the small financial burden necessary to keep the organization keenly active is inconsiderable when taken as a whole.

The industry needs it, will always demand it, and can have it most efficient by financially endorsing it.

Presidents and secretaries will come and go, but let me impress this fact upon you: The very best efforts of the highest talent you can secure will accomplish but little if there is not a feeling of permanency and the virility of strong business men to support.

The acceptance of elective positions of honor is to the conscientious man an assumption of responsibilities that mean work and worry.

To the end that we might have a strong centralizing feature, your board during the past year has greatly strengthened our credit rating department, and coupled this supervision with our secretary's duties. It has always been a valuable feature, and the National is responsible for it and should profit by it.

The efforts that business men must make to protect themselves from financial loss due to poor credits and bad accounts may seem futile, considering all the devices we can and do surround ourselves with; but it is very gratifying to know from a fellow lumberman that John Jones does or does not pay his bills promptly or otherwise.

It is desirable that we have an organization competent to cooperate and work with the government in its various departments that vitally concern the industry.

It does not seemingly affect the individual tax payer that the government, through its various departments, spends vast sums to investigate the will-of-the-wisp lumber trust, but it is highly important to the people at large to know the national expenditures and the plain, unvarnished truth about an industry that concerns more labor than any other.

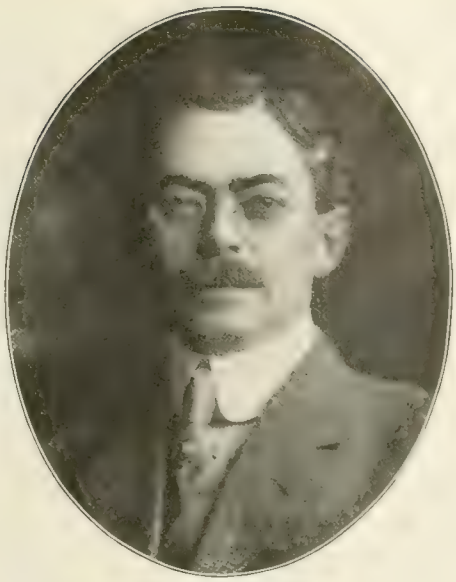
This organization must have men who are competent to dig up these national costs, clarify the industrial atmosphere, acting as a bureau of information to the government, which after all is the people.

One of our chief aims is to secure among the manufacturers of lumber of these United States uniformity of manufacture. I believe in some of our local associations a great deal has been done along this line. In discussing this matter with the chairman of the committee I conclude the report will be instructive and interesting.

The closer application we have on these lines, the less waste, the better utilization of by-products, and the wider our markets. Our producing centers are being drawn closer together by the linking of our two coasts



W. C. LANDON, WAUSAU, WIS., VICE-PRESIDENT.



EDWARD HINES, CHICAGO, ILL., MEMBER BOARD OF GOVERNORS.



F. L. RICHARDSON, ALPENA, MICH., MEMBER BOARD OF GOVERNORS.

through the canal, and the probable permanent improvement of the great Mississippi river and its tributaries.

I hope to see the time when a national standard size will mean the same finished size wherever it is manufactured in the United States. If this size is deviated from, the consumer must pay the cost. Strong competitive conditions will of course modify this in a measure, but economy, conservation and profits demand it.

We can only bring about a better understanding in these matters by conference and continued effort. The elevation of the business to a higher plane of commercial enterprise and the elimination of trade jealousies which belittle the efforts of a competitor.

The co-operation we give our secretary in his efforts to secure statistical information will determine the value of these statistics. I maintain that the collective data this association can assemble will do more toward government co-operation and an enlightened public opinion than any literature we can spread.

Facts and figures will show the vast army that is being fed and the paucity of lumber barons.

This association has co-operated with the Department of Forestry and should so continue. The very cordial support our membership gave to the establishment of forest schools must always stand out as a shining example of liberality.

The proper care and protection of this great asset affects the entire present and future population, and it is only through these larger national associated efforts that we can be effective.

The many questions of the tariff, taxation and conservation which affect not only the life of the trees but the perpetuity of water supply, the vast irrigation problems and the very habitation of man,—all these must be watched and legislated for.

The matter of freight rates, railroad claims, car equipment, both for lumber and logs, are matters that have national significance, and can only be so approached with the commissions organized and government regulations now in force.

One section will profit by the experience of another, and the benefits are mutual.

I know of no more effective conservation argument than a permanent flat car stake, both for logs and lumber, and it will have to come.

We can always find more work to do than we have money to spend, and, conversely, the work we do is determined by the money we collect.

For some time we have been actively at work on an advertising campaign, but its very inception and magnitude appalled its ardent supporters. The possibilities are apparent, but no steps involving the association in financial disaster could be inaugurated by a sane board, and no steps to carry on any work of this kind could be undertaken without the money in hand.

The very conception of the work, however, had its beneficent results and the renewed individual effort and the work of local associations have proved the wisdom of the undertaking.

I do not feel that any board of directors should be placed in the embarrassing position of registering the vote of their represented associations, and then have the integrity of that vote questioned.

If we are to expend money, it must be for the collective benefit of all. We are busy as an association in advertising and talking wood and its uses.

Our fight is against substitutes, and we have, by the establishment of creosote plants, so prolonged the life of our product that the argument of cement or rock is of no avail.

We are true conservationists because, by prolonging the life of our timber by the use of creosote we perpetuate our lumber. At all events, we greatly prolong its life and thereby decrease the waste by rot and decay.

We are educating the people to believe in a creosoted paving block, the best and most permanent paving ever laid.

Business conditions greatly temper the views of individuals as to advertising and the necessities of showing the consumer what can be accomplished with wood.

The association can have no better evidence of the loss to the industry in the uses of common lumber than in following the arguments in the "Pridham" case,—paper boxes against wooden retainers.

The trouble is, we self-satisfied lumbermen go to sleep regarding the possibilities of our product, and livelier, keener and more vigorous pushers of other commodities take our business away from us. Then we get busy and go after it,—all at how much cost?

The business sentiment of the country has finally crystallized into an organization of which this association is a member, in the Chamber of Commerce of the United States of America. Our own people seem to have been slow in adopting this progressive plan, so satisfactory in foreign countries, of providing this form for full and open discussion of the needs of the business interests of the country. Heretofore, it has been every industry for itself, regardless of the other fellow. I believe this broader view of our national business problems is the highest mark of patriotic American citizenship. Our government officials must in this way secure some indications of the business needs of the country.

If we falter in this effort and neglect our opportunities, the advocates of industrial war and political turmoil will ladle out to the American people anything they elect from the political soup-tureen.

Labor and capital are vitally concerned in the prosperity of our industries. Neither will support for long a bankrupt concern and both must share alike in results.

Stockholders and employes are of one mind and perfectly human in looking for these results, measured arithmetically in dollars and cents.

There is no question more momentous than the problem which concerns the rank and file of all industry, and those of us who must continually figure to meet the pay-roll and the dividend are more concerned in the enactment of sane legislation than the political demagogue or the most ardent labor unionists.

The vast army of American industry requires such men as are leading and have led the Chamber of Commerce of the United States, Harry A. Wheeler, and the National Association of Manufacturers, John Kirby, Jr., to withstand the dynamite of a misguided minority. What we need is industrial peace and a fair distribution of the comforts of life.

We have a great industry to foster and protect, a calling worthy of the most strenuous efforts, and a business that affects the lives of more employes than any other in the United States.

Lumber manufacturing takes the raw product and continually adds labor to it, which finally represents by far the greatest percentage of its value.

We should concern ourselves as much nationally about the welfare of our employes as of the stumpage itself.

Efficient labor and proper equipment means as much in the final cost to the consumer as the log itself.

I bespeak for this great industry, and through this association, your continued effort on these lines.

It is gratifying indeed to find in our annual gatherings that wonderful spirit of good fellowship which binds us together in friendly relationship.

Let us continue to strive in supporting and uplifting an industry to which we are giving our best efforts, and which in turn is providing us with toil and trouble, peace and comfort, life, and whatever of quiet luxury we enjoy.

Supplementing his address, Mr. Griggs said, in regard to the employers' liability act of Washington, that during the eighteen

months that it has been in operation he has observed that because of the "compulsory" provision in the law, the liability insurance taken out under it has assumed large proportions, and hence the cost of working of the law has been reduced to the minimum. He said further that the law has resulted in keeping within the state a large amount of money formerly going to insurance companies outside.

Following the roll call the president appointed the credentials committee.

After reading various communications, Secretary J. E. Rhodes read his annual report as follows:

Report of Secretary

Having been employed in January, I am able to report upon the work of the association for five months only. During the previous months of the year the association was principally engaged in an effort to raise money with which to conduct the proposed advertising campaign.

The following are the more important matters that have occupied our attention up to this time.

The National Lumber Manufacturers' Credit Corporation has made a material gain, and is now in the best financial condition of its existence. Arrangements for cooperation with the bureau of information of the National Wholesale Dealers' Association are being considered, and it is hoped that definite plans will be worked out which will be of decided advantage to both organizations in this work in the near future. Superintendent Biederman will report briefly some of the details of the work of the corporation.

Pursuant to instructions of the board of governors your secretary appeared before the ways and means committee of the House of Representatives at Washington, D. C., Jan. 13, and entered a protest against the removal of the duty on lumber. We have been in touch with developments since, and at no time has it seemed advisable to initiate a vigorous campaign to secure the retention of the tariff on lumber. While it is probable that the tariff bill as finally adopted will provide no duty on lumber, it would seem advisable for this convention to set forth the injustice of such action until Canada shall have removed certain discriminations against our forest products.

A conference was called in Chicago April 4 in conjunction with the National Association of Box Manufacturers as a result of which the National Classification Committee of Lumber, Boxes and Allied Interests, representing all organizations interested in the welfare of the wooden box industry, intervened in the now famous Pridham case. The effective work of this committee in presenting the evidence of the lumber and box interests to the examiner of the Interstate Commerce Commission will be explained briefly by W. B. Morgan, chairman of the committee. Your secretary was made secretary and treasurer of the National Classification Committee, and is in touch with this work.

We were instrumental in securing the retention of a large portion of the appropriation for the maintenance of the timber testing and laboratory work of the Federal Forest Service, after the entire appropriation had been stricken out of the Agricultural Appropriation bill by the House of Representatives.

The monthly statistics of cut and shipments inaugurated two years ago have been continued up to this time with the cooperation of over 700 sawmills, but they are not satisfactory because the hardwoods and softwoods are not separated in the totals. This work costs about $200 per month, and it will be advisable to either increase its scope slightly, or arrange so that each of the affiliated associations shall simultaneously issue the totals of production and shipments as reported by the mills within their own territories, the National association combining the results and publishing the summary. As most of the associations already issue these statistics monthly, this plan would obviate the necessity of the National association, requesting returns direct from the individual mills and prevent the duplication of much of the work done by the member associations.

Your secretary is a member of the board of directors of the American Forestry Association, and together with J. B. White, chairman of our conservation committee, who is also a member of the board of directors of the American Forestry Association, had the pleasure of representing the lumber manufacturers at a meeting of the board held at Asheville, N. C., March 24. The secretary is also a member of the board of editors of the American Forestry Magazine, and is also a member of a sub-committee of the forestry committee of the National Conservation Congress. These facts are mentioned to show that we are closely in touch with the forestry movement. Men prominent in this movement in the United States appreciate the active cooperation of the lumbermen, and realize the development of economic conditions that is necessary before we can apply scientific forestry methods to our business. It behooves us to keep closely in touch with the forestry movement.

The National association was represented at the hearing upon track scales and track scale weights before the Interstate Commerce Commission at Washington, D. C., April 16 by George K. Smith of St. Louis, who will report upon the same. Briefs have been filed by the West Coast Lumber Manufacturers' Association and by the Southern Cypress Manufacturers' Association. It is a matter in which our combined membership is very much interested.

Believing that our members would be interested in being advised of those matters before Congress which in any way affect the lumber industry, we have issued occasional circulars covering very briefly information concerning proposed legislation and the activities of various government departments. These circulars will be issued while Congress is in session, and sent to those members desiring them.

Certain interests are seeking to discredit the wooden shingle, and the agitation against it has been carried into various cities where ordinances to prevent the use of shingles for new construction are being considered. The principal point of attack just now is Birmingham, Ala., where the Southern Cypress Manufacturers' Association and the West Coast Lumber Manufacturers' Association, through the office of the National association, are co-operating with the local lumbermen in an effort to counteract the efforts of the substitute interests.

The foregoing refers briefly to the more important accomplishments of the National association during the past five months. It is proposed that the association should undertake various lines of work for the benefit of the lumber industry, among which the following are suggested:

The standardization of patterns and sizes of dressed lumber in softwoods, a suggestion not difficult of accomplishment if taken up seriously. Also to work out with the box manufacturers a standard of box lumber in order that a standard of strength tests and sizes for boxes may be universally adopted, as is so much desired by the various classification committees of the railroads.

An exhaustive investigation of the progress made to date in the utilization of waste material both in the woods and sawmills, to be made by an expert working under the direction of a committee, who will be competent to recommend such further experiments as may be necessary to carry present processes of utilization to the highest commercial efficiency.

The establishment of a traffic department for the purpose of investigating comparative railroad rates on lumber and other commodities, and to handle transportation questions of common interest coming before the Interstate Commerce Commission.

To promote the proposed forests products exhibition, organizing a stock company to finance the same for the purpose of advertising lumber products in that manner without any direct financial returns other than the reimbursement of costs.

The establishment of an Insurance Department for the management of a mutual inter-insurance feature, which it is believed would produce a revenue sufficient to pay all expenses of the organization; and to keep in touch with insurance legislation, including workingmen's compensation, in the various states, as well as to report to the manufacturers the affairs and standing of the board fire insurance companies.

The employment of a professional forester of national reputation, who will consult with and advise private owners of timberlands as to the best methods by which scientific forestry can be applied to practical logging operations in order that the timber supply may be perpetuated. It is contended that conditions exist in various sections of the country which make such work feasible at this time, or, which at least justify experiment, and that if the lumbermen do not themselves take the initiative in adopting such methods, they may some day be compelled to do so.

Obviously, not all of these suggestions can be adopted now, although it will be seen that there is much which the association can do for the good of the industry, which cannot be done by the territorial associations. We are very sure that the National Lumber Manufacturers' Association has justified its existence up to this time. It will be able to accomplish results in the future only in proportion as it is supported by those in whose interest it is conducted.

Report of Treasurer J. A. Freeman, of Pasadena, Cal., was then read by Secretary Rhodes.

Secretary Rhodes then read the report of the meeting of the board of governors. They held a meeting at the hotel on Monday preceding the convention. The conclusions of the governors are embodied in the report of the resolutions committee appearing at the end of this story.

W. E. Biederman, manager of the National Lumber Manufacturers' Credit Corporation, publishers of the Blue Book, with offices in St. Louis, Mo., reporting on the work of that department of the National Lumber Manufacturers' Association, said that the Credit Corporation is in excellent shape in every way, and its usefulness is growing. He said that it is planned to open up a branch office in Chicago in the near future.

President Griggs then introduced Alfred G. Cruickshank, of New York, who spoke on the subject "The Business of Government and the Government of Business." This talk appears as a special article in this issue of HARDWOOD RECORD.

Col. L. C. Boyle, of Kansas City, an attorney prominently connected with lumber affairs, spoke convincingly on the subject of "Workmen's Compensation Legislation." This address will appear as a special article in the June 25 issue of HARDWOOD RECORD. In commenting on the provision in the Ohio law which provides that an employe can, if he wishes, have a jury trial, Mr. Boyle said that this was

a weakening provision as the law should be specifically a compulsory bill as to both employers and employes.

The following committees were then appointed:

COMMITTEE ON NOMINATIONS

H. R. Foster, Malvern, Ark., Yellow Pine Manufacturers' Association.
William Irvine, Chippewa Falls, Wis., Northern Pine Manufacturers' Association.
A. T. Gerrans, Houma, La., Southern Cypress Manufacturers' Association.
Edward Hamar, Chassell, Mich., Northern Hemlock and Hardwood Manufacturers' Association.
William E. DeLaney, Cincinnati, O., Hardwood Manufacturers' Association.
F. L. Richardson, Alpena, Mich., Michigan Hardwood Manufacturers' Association.
F. E. Waymer, Jacksonville, Fla., Georgia-Florida Saw Mill Association.
W. B. Roper, Norfolk, Va., North Carolina Pine Manufacturers' Association.
Thorpe Babcock, Tacoma, Wash., West Coast Lumber Manufacturers' Association.
A. W. Cooper, Spokane, Wash., Western Pine Manufacturers' Association.

COMMITTEE ON RESOLUTIONS

Charles Keith, Chairman, Kansas City, Mo., Yellow Pine Manufacturers' Association.
Edward Hines, Chicago, Ill., Northern Pine Manufacturers' Association.
George B. Watson, New Orleans, La., Southern Cypress Manufacturers' Association.
W. C. Landon, Wausau, Wis., Northern Hemlock and Hardwood Manufacturers' Association.
Bruce Odell, Cadillac, Mich., Michigan Hardwood Manufacturers' Association.
W. B. Roper, Norfolk, Va., North Carolina Pine Manufacturers' Association.
Thorpe Babcock, Tacoma, Wash., West Coast Lumber Manufacturers' Association.
R. G. Keiger, Spokane, Wash., Western Pine Manufacturers' Association.
F. E. Waymer, Jacksonville, Fla., Georgia-Florida Saw Mill Association.
John H. Himmelberger, Cape Girardeau, Mo., Hardwood Manufacturers' Association.

AUDITING COMMITTEE

O. L. Benway, Hammond, La.
Huntington Taylor, Cloquett, Minn.
R. G. Keiger, Spokane, Wash.

COMMITTEE ON CONSTITUTION AND BY LAWS

Charles A. Goodman, Marinette, Wis., Northern Hemlock and Hardwood Manufacturers' Association.
O. O. Axley, Warren, Ark., Yellow Pine Manufacturers' Association.
R. G. Chisholm, Minneapolis, Minn., Northern Pine Manufacturers' Association.

After announcements by the secretary, the meeting adjourned until 2:30.

TUESDAY AFTERNOON SESSION

The afternoon session was opened by reports from the various affiliated associations. Of all the reports those given by delegates of the Northern Hemlock and Hardwood Manufacturers' Association and the Michigan Hardwood Manufacturers' Association, R. S. Kellogg and Bruce Odell, respectively, were the most specific and interesting. Mr. Odell talked on "Association Efficiency," emphasizing the necessity for efficient secretaries.

On the whole the reports indicated that the lumber business is in a very fair shape with prices holding well in all lines, with the exception of yellow pine. Confidence in the future of business in general was expressed. The reports demonstrated that the affiliated associations have done a great deal of valuable work in the past year.

E. F. Perry, secretary of the National Wholesale Lumber Dealers' Association, was asked to address the meeting. He said that his association has members in all but one of the affiliated associations, and that he felt that he really was a member of the National Lumber Manufacturers' Association. Mr. Perry suggested the advisability of greater co-operation between the National Lumber Manufacturers' and his association, saying that a great deal of time and money is wasted in the duplication of effort to effect certain required things. One of these is the matter of credits. He said that a great deal of the work of the two associations is parallel. Other instances are those of railroad overweights, increased freight rates, shingle count, etc. In all these matters, according to Mr. Perry, the two associations have been pulling singly rather than together, and the result has not been as satisfactory as it would have been if they had co-operated closely.

Speaking of business conditions he said that while he had heard of over-production and consequent lowering of prices, conditions in the eastern territory show that the present easing of prices is but temporary and he thinks there is no just occasion for worry. He said that the demand has fallen off somewhat, but that it should not result in forcing markets as it is but seasonable. He suggested that there should be some means of holding lumber during dull periods so that the market would not be flooded. Speaking further of co-operation, Mr. Perry said that such working together should effect a mental attitude that would work to the great benefit of the trade at large. He added that as far as he can see manufacture is not going on any faster than consumption.

The speaker concluded by pleading for more detailed and sincere reports on credits.

After a few words of announcement from Secretary Rhodes, Edward A. Hamar, of Chassell, Mich., delivered an address on "A Forest Products Exposition," which appears as a special article in this issue.

Speaking along the lines outlined by Mr. Hamar, Dr. Von Schrenck, of St. Louis, said that he has observed in the last two years a change in the attitude of the public toward lumber, which is instanced in the opposition to lumber shingles. It is mostly the result of erroneous information published in the newspapers, he stated, such as derogatory comments on wooden cars, poles, etc. He said that because of lack of knowledge of the different properties of wood, architects are in many cases coming to feel a distinct animosity towards wooden construction. They have permitted builders to erect certain structures with entirely unsuited classes and sizes of timber and lumber, which have not stood the test because unsuited to the conditions imposed. He said that there is a distinct feeling in the public mind that the quality of lumber and timber available is not anywhere near what it used to be, and said that the time is here when this opposition must be met squarely by telling the public the actual facts in the case. He said there should be a centralized bureau for publicity of the matter.

Dr. Von Schrenck said that he had talked with a railroad engineer regarding bridge construction and that this engineer said specifically that a properly constructed wooden bridge of medium size is cheaper to erect and to maintain than a similar steel structure.

Secretary Rhodes then read the report of the committee on standard sizes, which is shown in part as follows:

Report of Committee on Standard Sizes

Naturally the different lumber producing territories had constructed patterns such as were required by the trade for the different uses, which in time developed into well established standards, and gradually extended into larger consuming territories calling for various kinds of lumber. As these different territories commenced to overlap the difficulties relative to different standards of manufacture in the same class of lumber became noticeable. Through the necessity of dealers having to keep separately the various sizes of like patterned stock, there at once developed a demand, on the part of the dealer especially, that future shipments should be of stock which would conform to that which he most largely carried on hand. This resulted in requiring the manufacturers to produce such standard sizes of manufactured lumber for the different territories into which he shipped his lumber in competition with other kinds of lumber. As most of this lumber was used for the same purposes, there existed no sound reason for a continuance of different finishing sizes or styles of working. Naturally, many efforts have been made toward establishing a single standard of manufacture for the same class of lumber, though it be produced from several species of timber. The main difficulty in this effort became evident in trying to decide which of the standards in use was the most practical. The determination was also made difficult on account of the large amount of worked stock in the hands of both the dealer and the manufacturer, and therefore the desired progress has not been made in this direction—such as should be in keeping with the increased use of one wood over another—as, for instance, that which has occurred in the extended use of yellow pine lumber gradually entering comparatively all parts of the United States. We, however, have this result, that the standard sizes of dressed lumber used by the Yellow Pine Manufacturers' Association are best known and most generally used. Notwithstanding that those standards are most widely used and known, there today exist differences in standards used by members, of other manufacturers' associations producing the same kind of lumber—the differences, however, are comparatively few. Owing to the general use of yellow pine, its production being about fifty per cent of all the principal woods produced in the United States, the manufacturers of Pacific coast forest products were influenced to adopt, in the main, the same dressing rules which now in practical effect apply to about sixty per cent of the total amount of commonly used lumber manufactured. Most of the variations now exist in sizes. Consequently there should not be much difficulty in having the different associations consider modifications which would obviously show for economy in production.

WEDNESDAY MORNING SESSION

George K. Smith, reporting for the credentials committee, said that there were seventy-nine delegates present having one hundred and forty-four votes in the convention.

Capt. J. B. White, of Kansas City, reporting for the conservation committee, read a paper on conservation which appears elsewhere in this issue.

Following a talk on the prejudice which exists in the public mind against forest products, President Griggs introduced W. B. Greeley, assistant forester of the United States. Mr. Greeley talked interestingly on the sale of national forests and said in part as follows:

It is not generally realized that the United States is engaged in the business of growing and selling timber. Under the policy of creating national forests, however, the people of the United States collectively have become, with exception of the Government of Russia, the largest single timber owner in the world. Their holding contain some 600,000,000,000 feet of stumpage, a little over one-fifth of the total stand which the Bureau of Coporations credits to the United States.

The largest part of this publicly-owned stumpage, including upwards of 150,000,000,000 feet, is in the fir belt of the northern Pacific coast. Nearly 100,000,000,000 feet more stands in the spruce and hemlock forests of Alaska. Ninety-two billion feet is estimated for the national forests of the sugar pine belt through the California Sierras and Coast Ranges. The national forests of the northern yellow pine region in Montana, Idaho and eastern Oregon and Washington are credited with 116,000,000,000 feet of merchantable timber; and those of the southwestern yellow pine region in Colorado, Utah, Arizona and New Mexico, with 55,000,000,000 feet. The white pine belt of northern Idaho furnishes over 17,000,000,000 feet of national forest stumpage and the western larch belt of northern Montana over 19,000,000,000 feet. The lodgepole pine and spruce forests up and down the Rocky Mountains contribute 50,000,000,000 feet to the national woodlot. The rest is made up of small quantities of yellow pine in the Black Hills of South Dakota, shortleaf pine and hardwoods in the two national forests of Arkansas and southern yellow pine in Florida.

Members of the Forest Service are fond of saying that this timber is in national forests, publicly administered, for three things. It is to be put to use now in our own day and generation. It is to furnish a future supply of timber, larger and better than the present if we can make it so. Forestry, which is not yet profitable for many private owners, becomes possible under joint, or public, ownership. Lastly, it will in the long run help the people of the United States maintain competitive conditions in the production of forest products, wherever such help becomes necessary. And when we are talking to lumbermen we are prone to say most about the immediate use of the timber in the national forests.

All told, some forty large and medium-sized operations are cutting national forest timber for the general markets of the country. The greater part are mills with a capacity of from 10,000,000 to 20,000,000 feet annually, which purchase from three to five years' supply of government stumpage which is relatively accessible to existing railroads or drivable streams and can be exploited at no great cost for new improvements or plants which log small bodies of public timber mixed with their own and logically handled by the same equipment. The remainder are large operations usually fed by the extensive railroad layouts built for the exploitation of inaccessible tracts or by corresponding investments in stream improvements to open up some body of national forest stumpage lying back from transportation.

In disposing of the timber on the national forests it is the aim of the service to provide first for the needs of local industries and communities. Sales for outside markets are made only when it is clear that the forests are growing more timber annually than the localities surrounding them require. In parts of the west having but limited supplies of timber and well developed local mining and other industries, like much of Colorado, the entire product of the national forests is required for local use and no timber is available for the operator who manufactures for the general markets of the country. In the vast timber belts of the Pacific coast and the northwest, however, local needs take but a small fraction of the yield. The local markets for the billions of feet produced annually on these public forests by growth are the main consuming regions of the United States; and it is the aggressive policy of the Forest Service to find buyers for this annual crop who will sell their product in the competitive markets of the country.

Small loggers and millmen are sought by the Forest Service to cut government stumpage wherever they are able and equipped to do the work. Accessible bodies of timber which can be logged practicably under the local conditions of the industry in amount of 5,000,000 or 10,000,000 feet or less are reserved for operations of this size. Where the timber is near a railroad or drivable river and the purchaser has a going manufacturing plant relatively small amounts need be purchased at one time. It is the policy of the government, wherever practicable, to encourage several small operations rather than a single large one. In the less accessible districts, however, much of the national forest stumpage can not be utilized without extensive investments for mills, railroads and other improvements.

Aside from the amount of stumpage contracted and the period specified for its removal the most important business requirements of the Forest Service relate to prices, terms of payment, prevention of speculation and monopoly, an availability of railroads for other purposes from the government. The law requires national forest timber to be sold at not less than its appraised market value. This is based upon a close estimate of the cost of logging and manufacture and the market price of the product, made by experienced lumbermen. Our stumpage prices represent what, to the best of our knowledge, is left after deducting from the current market price of lumber the producing cost, investment depreciation, and a fair return to the operator on the capital required in the enterprise. In all but the smaller sales the appraised stumpage rates are advertised for periods of from one to six months and every effort made to secure competitive bids. In the larger transactions printed reports and maps giving the detailed terms of sale, the location and character of the timber, the estimated costs of logging and manufacture, and such market data bearing upon its utilization as we are able to obtain are prepared and distributed.

The stumpage rates paid for timber purchased under long-term contracts are readjusted by the chief of the Forest Service every three or five years. An equitable basis for readjustment, which will secure to the United States such greater returns for its timber as may be justified by normal and reasonably stable increases in the value of the products manufactured from it and at the same time give the operator a sufficiently definite basis on which to organize and finance his business, has been the knottiest problem encountered in the development of the timber sale policy on the national forests. The method which has been used in our larger sales is, I believe, somewhat unique in transactions involving the transfer of stumpage. It is based upon an agreed stumpage price and an agreed lumber price at the beginning of the sale. The stumpage price may be advanced only in the event of increases in the price of lumber obtaining for periods of two years. An agreed percentage of such increases, as compared with the base price at the outset, may be added by the government to the stumpage rates, period by period, at the intervals when readjustments are made. It is not probable that all the present details of this method are in final form, but the principle apparently furnishes a working basis on which operators are willing to purchase national forest timber and make large investments for its exploitation. And it has made possible the adoption of a policy of long-term sales covering large bodies of stumpage without departing from what we believe to be a fundamental requirement, viz., securing for the people of the United States the speculative increase or unearned increment in the value of this public property.

Payments on the purchase price under the national forest contracts are required only in small installments, covering not more than the normal cut of one or two months, in advance of the actual cutting of the stumpage. This system, relieving the operator from large investments in stumpage and carrying charges for interest, taxes and protection, compensates in part for the loss of the speculative value of the timber.

Speculation in national forest stumpage is prevented by the periodic adjustments of stumpage prices. Furthermore, sales are restricted to actual operators, excluding buyers who desire to hold stumpage for higher future values. This is enforced by a time limit which is sufficient only for continuous operation, and by the further requirement that specified minimum amounts must be manufactured during each year or other stated period of the contract. Other checks against speculation are afforded by investigation of the financial responsibility of purchasers before contracts are approved and by the act of Congress which forbids the assignment of contracts.

One of the distinct results sought by the Forest Service through its policy of contracting large bodies of timber in inaccessible locations is the opening up of the national forests by the construction of new railroads. An essential feature of this policy is that the railroad built by one operator must be available to handle the logs or lumber of the next buyer. Hence the requirement in sale contracts that all main railroads be made common carriers or that they shall be available to transport timber bought by other purchasers at rates in which the government shall have a reasonable voice. Other preventives of monopoly exist in the prohibition upon the assignment of contracts, in the advertisement and publicity given to the sale before the timber is awarded, and in the exercise of discretion in the acceptance of bids. Awards will not be made which would result in the control of large quantities of stumpage by affiliated operators. Sales to lumber companies owning large quantities of timber on their own lands are declined, if there are other applicants, and companies cutting under government sales are refused further purchases during the life of their contracts if there is any other demand for the stumpage involved.

It would have been impossible for the Forest Service to sell large tracts of public timber to single operators without incurring the ready criticism of favoring monopoly. As a matter of fact, the largest sale yet made or contemplated includes less than two-tenths of one per cent of the merchantable stumpage on the national forests; and almost without exception the construction of railroads or other transportation facilities in connection with large sales has made additional timber which formerly was out of reach available to any competitor.

The technical requirements of national forest sale contracts are limited to half a dozen clauses imposing simple restrictions upon cutting. These are designed to leave the ground in the best practicable condition for restocking and future production. They provide for the reservation of

the smaller and younger timber in stands where young and old trees occur together, or of a small portion of the mature timber for reseeding, as the conditions in each case may require. In forests of the latter type, like the heavy Douglas fir stands of the west coast, the requirements of forestry are satisfied by the reservation of but five or ten per cent of the merchantable timber for reseeding purposes. In the forests of mixed ages, like the yellow and sugar pine stands of California, the government reserves from twenty-five to thirty-three per cent of the merchantable stand. The aim in such forests is to leave a good stocking of smaller timber which will justify another cutting in fifty or sixty years. The second chief requirement in the interest of forestry is the disposal of slashings either by piling and burning or by constructing firebreaks and burning the brush as it lies.

In disposing of ripe stumpage, the government has been handicapped by the inaccessibility of three-fourths of the timber on the national forests and by the presence of larger quantities of privately owned stumpage much closer to the markets and forced upon them in many cases by bonded indebtedness, mill investments, and other carrying charges. The tendency to overproduction in the manufacture of lumber from private holdings and the broken markets in many parts of the west during 1909, 1910 and 1911 have been further factors limiting the capacity of the government to sell the mature timber on its holdings which is in need of cutting. Since February 1, 1905, when the Forest Service assumed charge of the national forests, the annual cut of stumpage has risen from practically nothing to 431,000,000 feet, board measure, in the fiscal year ended June 30, 1912. During the last fiscal year nearly 800,000,000 feet of timber was sold, and up to May 1 in the present fiscal year over 1,800,000,000 feet has been placed under contract. Our sales business is now increasing rapidly with the expansion of the lumbering industry in the western states and the extension of transportation facilities in the vicinity of the national forests. It is probable that within three years the annual cut will reach 2,000,000,000 or 2,500,000,000 feet.

It is roughly estimated that the annual growth on the national forests aggregates 6,000,000,000 feet. This figure represents approximately the interest returned on this public investment, the yield which can be cut every year without diminishing the supply. It is the policy of the Forest Service to increase the sales of national forest timber as rapidly as this can be done at adequate prices and under stable contracts until the annual cut approaches or equals the annual growth. Thereafter, except as heavier cutting may be advisable in certain localities for the time being to remove deteriorating material, the annual cut will be restricted to the yield from the forests, a cut which can be maintained for all future time.

At First Glance

At first glance it might appear that a more profitable business policy would be to reserve the public timber largely or entirely from sale for the time being. This course has been urged in many instances: First, by conservationists who look ahead to the timber shortage and maintain that the chief function of the national forests should be cold storage of a large reserve supply; second, by business men who point out that the United States is in a position financially to curtail its present sales and that much greater returns will be realized from marketing this timber two or three decades hence when the shortage is beginning to make itself felt; and third, by lumber manufacturers who raise the point that any sale of national forest timber tends to stimulate overproduction in the industry and knock the bottom out of their markets.

A strong private corporation whose main purpose was the greatest ultimate financial return might unhesitatingly follow such a policy. The aggregate capacity of the sawmills in the country now exceeds the normal demand for lumber, which must be stimulated to absorb the cut by advertisement and keen selling organizations. The many large operations which are heavily bonded and can meet carrying charges only by manufacturing and selling lumber and the large outstanding investments in manufacturing plants promise a sustained output almost regardless of the market fluctuations. In other words, an industry organized along such highly competitive lines must continue to deplete the available raw material at a rate which is now generally put at three times the annual growth of all of the forested lands of the United States. Under such conditions it would seem unquestionably to be the better commercial policy for a strong owner, like the United States government, to hold its stumpage; and there is reasonable ground for the manufacturer of private stumpage carrying heavy investments to feel that the government should keep out of the market.

An old piece of timber, in which net production is practically nil, can by judicious cutting and protection be turned into a real forest in the economic sense which is producing from 200 to as high as 800 board feet of timber annually on every acre. This work of remaking old forests by conservative cutting can not be pushed by the government blindly, or in disregard of the limits fixed by business prudence and proper recognition of the commercial value of the material which is marketed in the process. Furthermore, limitations placed on the amount of timber cut from national forests by their inaccessibility and the competition with private timber to which I have referred necessarily will prevent the complete working over of the forests for many years. It is doubtless fortunate that a considerable portion of the surplus stock of virgin stumpage on the public holding should by these very limitations be kept out of the market for the next fifteen or twenty years.

In many instances, furthermore, the cutting of national forest stumpage is vitally related to local industries. It may be a local need for timber which can not be supplied so cheaply or effectively from any other source, or the general economic development of an isolated region which awaits transportation and a dominate local industry. Under such circumstances a restrictive sales policy would impose wholly unjustified checks upon the development of regions which properly regard their claims upon national forests as entitled to preference.

Other practical considerations prevent the adoption of the most advantageous commercial policy in the administration of national forest timber.

Critics of the Forest Service who occupy the opposite fence urge that much greater amounts of timber be forced on the market immediately and that stumpage prices be reduced to bring this about. It is claimed that if enough national forest timber is sold the country as a whole will get cheaper lumber; and that the government should sell, at any necessary reduction in price, enough timber now to force down the market in the principal consuming regions.

Such a course is held by the Forest Service to be contrary in the first place, to the interests of the public as the owners of the national forest timber. The first series of sales working over the virgin stands should yield under the present basis of appraisal not far from $2,000,000,000. We do not believe that this should be reduced by the adoption of bargain-day rates to one billion or three-fourths of a billion, a reduction tapping the road and school funds of every national forest county as well as the Federal Treasury.

The service believes, in the second place, that such a policy would be against the interests of the people as consumers of forest products. To our thinking, two very definite things would happen. First established mills would stop cutting their own timber wherever possible in order to cut cheap public stumpage. This would not help the consumer. Little more lumber would be produced and prices would not be affected. A far more probable result would be the absorption of the difference in stumpage prices in the profits of the operator. Secondly, the public reserve would be rapidly dissipated at a time when it is not needed and would do neither the consumer nor the country at large any good. On the contrary, whatever effort may be made to concentrate the control of standing timber with a view to ultimate control of lumber production would be enormously strengthened by such a rapid dissipation of the public supply which ought in the long run to give the public its best check upon monopoly.

Under the present competitive conditions in the manufacture of lumber and the constant tendency to overproduction no conceivable quantity of public stumpage which could be sold would affect the general market. If production is ultimately more closely controlled, and the concentration of standing timber seems to point in that direction, a large public supply will be of inestimable value to the country at large in maintaining competitive conditions in the industry. Wholly aside from the imprudence of disposing of public property for less than it is actually worth, it would be the height of folly for the people to throw away this future control of the acute situation which the exhaustion of the virgin forests is bound to bring about by attempting to force their stumpage upon the market now at cut rates.

We need the coöperation of your association, and particularly of its affiliated organizations, in the compilation of lumber prices.

A. S. Caldwell, president of the Mississippi River Levee Association, spoke in opposition to the Newlands river bill now before Congress. Mr. Caldwell represents a faction which favors the control of the floods by means of adequate levees only. He said that in all streams levees are essential and that the object of his association is to create public sentiment to influence Congress to follow the lines suggested by his organization.

In commenting upon the Newlands bill Mr. Caldwell criticized the idea of providing reservoirs, which he said are efficient on small streams, but deficient on such large bodies of water as the Mississippi river, as they must be close to the region benefited, and as the areas required for the reservoirs and the cost of constructing them would be so enormous as to be prohibitory. He said that a reservoir to have taken care of the excess water in the recent flood would have had to be 700 square miles in surface, an area almost as big as New Jersey. He said that the excess water that fell above Louisville alone in the recent flood on the Ohio river, could have been held only by an excess reservoir 1,740 miles long, one mile wide, and twenty-five feet deep.

The speaker quoted the Scientific American regarding the feasibility of reforestation as a means of checking floods. He said that the floods in many forested areas were much less in 1913 than in 1857, at which time the forests were practically untouched. He said that in 1837 the water at Pittsburgh was five feet higher that in 1913, and that in 1844 the Mississippi river at St. Louis reached the highest level it has ever reached.

The speaker said that, according to the Scientific American, the flood of 1913 was caused by unusual rains and was not in any

way affected by the presence or absence of forests. He said that one objection to the reforestation plan is that for such an immense stream as the Mississippi river, in order to be feasible, too large an area would have to be taken from farmlands to permit of the plan being carried out. The speaker advocated the passage of the Humphreys' bill, which he said is purely national and asks for money for concrete purposes as affecting the lower Mississippi river only.

George H. Maxwell, of New Orleans, then delivered an address on the control of the floods, in which he took the opposite stand from Mr. Caldwell, advocating in a very convincing manner the passage of the Newlands' bill. Mr. Maxwell maintained that other sections are just as much entitled to consideration and protection as is the lower Mississippi valley. He showed conclusively that in order to work the matter out to a satisfactory conclusion it must be done right when it is done, and that the Newlands' bill provides for sufficient money and supervision to work the matter out successfully, without involving it in politics. Mr. Maxwell's address is published as a special article in this issue.

W. B. Morgan, of the Anderson-Tully Company, Memphis, Tenn., read a paper reviewing the recent fiber box hearings at Chicago and Los Angeles. Mr. Morgan is chairman of the National Classification Committee of the lumber, wooden box, and allied interests. His paper showed that the case of the wooden box and allied industries seems to be in a favorable position as far as a possible favorable culmination is concerned. The proceedings of the case have been reviewed in previous issues of HARDWOOD RECORD.

Mr. Morgan particularly complimented Charles E. Brower, who for three years has been actively engaged in the work and is now withdrawing.

Charles E. Brower then acknowledged the compliment paid to him by Mr. Morgan, and commenting on the Chicago hearing of the fiber and wooden box case said that a question of motive was behind rule 14B. He said that large shippers arranged to effect a lower rate, and that the misrepresentation by the fiber box people was a direct embargo on lower grades. He said further that the present classification on goods shipped in wooden boxes was the original classification, and that the fiber container has come in without the consideration of the merits of the package or the advisability of applying different rulings as to classification. Mr. Brower said that he is confident that the case will go to a successful issue.

He said that under the western classification, shippers originally claimed that the high cost of lumber was driving them to the fiber box. He said further that because they could not load the full minimum weight car with goods packed in fiber containers they had effected a reduction of the minimum weight to 12,000 pounds in the case of lamp chimneys. He said that this one-third reduction in weight was a direct profit to them in the matter of saving freight rates, and hence their claims that wooden boxes are more expensive are not founded on fact. He said that the railroads are not entitled to advances until they recoup losses from shipments in fiber containers.

J. B. White of Kansas City then recommended that all unsettled features of the wooden and fiber box controversy be referred to the new board of governors with power to act.

The meeting then adjourned until the afternoon.

WEDNESDAY AFTERNOON SESSION

The afternoon session was opened with the paper by George K. Smith, reviewing the track scales hearing before the Interstate Commerce Commission at Washington. This hearing has been covered fully in previous issues of HARDWOOD RECORD.

John R. Morehead of the National Federation of Retail Merchants delivered an interesting and forceful address on the subject, "Where the Interests of the Manufacturers and Retailers Meet." He appealed for co-operative action in behalf of business, saying that basic principles are at stake in the controversy between labor and politicians on one hand and legitimate business on the other. He said that politicians are not cognizant of changing conditions in the business world, not being business men and up in business methods and conditions. He said that the forces operating against business success should be met and that in order to meet these forces business must go into politics and see that the right legislation is put upon the books, and that such legislation and acts be enforced, and that business be not oppressed.

He said that primarily any action must be for all business as a unit, and that for any one industry to appeal alone would be folly. He said that the power represented by business in this country in the aggregate is enormous, but it must be used as a unit to effect any good.

The speaker commented rather sarcastically on the hue and cry for cheapness. He maintained that cheapness is not desired. He said that the cheapest available thing is the reputation of business men in the hands of politicians and newspapers.

As an instance of legislation inimical to business the speaker cited the Sundry Civil Appropriation bill, which has been fully discussed previous to this issue. He closed with an analysis of changes of distribution of population throughout the country, showing that 6,616 towns in eight states lost population between 1900 and 1910. He said that instead of "back to the farm," the slogan should be "back to the small town," maintaining that because of concentration of population in large cities the market for almost all commodities is lessened.

J. A. Freeman of Pasadena, Cal., gave an illuminating talk, entitled "What the Lumbermen Should Do for Their Own." Mr. Freeman said that the question is broad and embraces the whole range of human responsibility. He said that there are two questions which every well-to-do man must answer. The first question asked him is, how he got his money, whether he used fraud or oppression in gathering it. He said that there has been considerable effort made to evade the question, and that it is still asked and must eventually be answered.

The second question which the speaker said is asked is the query as to what rich men are doing with their wealth. He said that the opposition in this instance is vain, and that while a man may do with his own money what he wishes, he risks public friendship by so doing. He said that the man who cannot prove he has gotten his wealth entirely honestly is a failure. In commenting on the attitude of the average lumberman in this direction, Mr. Freeman said that most lumbermen are recognizing their responsibility in a good many ways. This attitude is shown in the erection of club houses, churches, cottages, etc., in connection with logging and sawmilling operations, and also in provisions for saving of wages. He said that this attitude will be the factor which will effect the elimination of the mythical gulf between the employer and employe.

In commenting on the recent suggestion of John C. Spry of Chicago that the lumber fraternity maintain a house for decrepit employes, he stated that the idea is splendid but that he could not personally determine in his mind a suitable way to work the plan out practically, but hoped that it would eventually be put into practical operation. He requested that a committee be appointed to work the scheme out.

In commenting further on the National association, Mr. Freeman said that he is realizing more and more the worth of its purpose. He said that, considering the strength of the southern pine and Pacific coast factors, they should get more closely together and should forget the differences which come up in connection with competition of the two classes of wood. He said that the questions suggesting themselves with the pending opening of the Panama canal emphasize the necessity of getting together.

A motion was adopted instructing the next president of the National Lumber Manufacturers' Association to appoint a committee to look carefully into the question, carrying out Mr. Spry's suggestion.

The addresses of Prof. R. C. Bryant of Yale Forest School, on what the Yale Forest School is doing, and H. S. Sackett of New Orleans, on the utilization of wood and mill waste, were

omitted because of lack of time. Mr. Bryant's paper simply reviewed the work of the Yale Forest School since its inception. Mr. Sackett's paper told of the new method of extracting valuable by-products from yellow pine waste in the South.

Capt. J. B. White very emphatically denied the statement appearing in certain publications, that the National Conservation Congress is dominated by big interests and is purely a scheme to effect certain things in its behalf. He denounced the statement as an absolute fraud and as malicious in the extreme.

The auditing committee then reported that the accounts of the treasurer were correct.

The nominating committee reported, recommending the election of the following officers for the ensuing year:

PRESIDENT—R. H. Downman, New Orleans.
VICE-PRESIDENT—W. B. McKay, Spokane, Wash.
VICE-PRESIDENT—J. B. Conrad, Glenwood, Fla.
VICE-PRESIDENT—W. B. McKay, Spokane, Wash.
VICE-PRESIDENT—S. J. Carpenter, Winnfield, La.
VICE-PRESIDENT—W. C. Landon, Wausau, Wis.
TREASURER—J. A. Freeman, Pasadena, Cal.

The report was accepted and on motion the secretary was instructed to cast the ballot.

Retiring President Griggs then appointed William Irvine and Edward A. Hamar as the committee to escort the newly-elected president to the chair.

President Downman gave a short talk of acknowledgment and appreciation of the honor bestowed upon him. He expressed his intention of using his best effort to carry on the work of the association in a satisfactory manner.

The new board of governors was then elected after nomination from the floor, as follows:

Edward Hines, Northern Pine Manufacturers' Association.
Edward A. Hamar, Northern Hemlock and Hardwood Manufacturers' Association.
F. L. Richardson, Michigan Hardwood Manufacturers' Association.
John M. Gibbs, North Carolina Pine Association, Inc.
F. E. Waymer, Georgia-Florida Sawmill Association, Inc.
J. B. White, Yellow Pine Manufacturers' Association.
A. T. Gerrans, Southern Cypress Manufacturers' Association.
George Stoddard, Western Pine Manufacturers' Association.
E. G. Ames, West Coast Lumber Manufacturers' Association.
R. M. Carrier, Hardwood Manufacturers' Association of the United States.

The nominees were elected by a unit vote.

The Hardwood Manufacturers' Association of the United States and the Pacific Coast Sugar and White Pine Association were not represented by delegates on the convention floor.

The committee on resolutions then reported. Charles Keith, chairman, moved that the proceedings of the convention be printed as usual and distributed among the members. The motion was carried.

Mr. Keith presented a resolution to the effect that no resolutions except those coming through the committee be considered.

Regarding the resolution on the removal of tariff on lumber, J. B. White submitted an amendment to be inserted, suggesting that the removal of the lumber duty is inimical to conservation and would result in an increase of waste, as southern manufacturers cannot pay twenty-four cents freight to northern markets on low grades in competition with duty free Canadian low grades. The amendment was accepted.

A resolution was presented to the effect that certain gateway points have been eliminated through the effect of freight tariffs. The resolution condemned this policy on the part of carriers.

A resolution was presented protesting against the removal of the duty on lumber, referring particularly to the prohibition on the part of Canada to the exportation of logs to the United States and the imposition of an ad valorem duty on dressed lumber into Canada from the United States. The resolution also pointed out that Canadian mills in the Northwest have an advantage over American mills because of the fact that the navigation laws of the United States give foreign steamship companies a decided advantage. J. B. White presented an amendment to the effect that the removal of the tariff would seriously militate against conservation.

The motion to abolish the Commerce court of the United States was earnestly condemned in a resolution which qualified its objection with the statement that the court should be continued if it could be given the power of reviewing the negative rulings of the Interstate Commerce Commission in order to protect the shipper as well as the railroad.

A resolution authorized the appointment of a committee of five to be appointed from a territory all points of which were within one night's ride of Chicago, which committee should be for the purpose of securing space in the daily press and other publications setting forth proper information regarding the lumber industry.

The Newlands river bill was heartily endorsed and a resolution made on that subject. This resolution was similar to that already adopted by other organizations.

The assessment levied on affiliated associations was increased, this increase being for the purpose of enlarging the work of the association, which enlargement has already been planned by the board of governors.

A forest products exposition in the control of the National Lumber Manufacturers' Association was indorsed in a resolution, and a committee of five authorized to formulate a definite plan.

A resolution put the association on record as favoring a referendum submitted by the Chamber of Commerce of the United States on the question of a non-partisan tariff commission.

Emphatic opposition to the passage of the Sundry Civil Appropriation bill, which question was submitted to the association by referendum from the Association of Commerce of the United States, was registered in a further resolution.

A resolution recommended that an inter-insurance department for liability insurance be organized. The importance of this action was recognized in the resolution and the belief that a revenue could be derived that would not only make this body self-supporting but should result in the accumulation of sufficient excess funds to apply on other work.

The administration of the interests of the lumber and wooden box people in the Pridham case by the National Classification Committee was heartily endorsed and a pledge was registered to the effect that wooden boxes for general uses be standardized according to weight and dimensions for certain articles to be shipped certain ways.

A resolution was proposed petitioning Congress to be as expeditious as might be consistent with efficiency in its attempt to revise the tariff satisfactorily. The proposal of this resolution was to culminate the agiation as quickly as possible, so that business would not be held in suspense any longer than was absolutely necessary.

The various attacks on wooden shingles as used in dwellings was heartily condemned with a resolution on that subject, and all affiliated associations were pledged to assist lumbermen in various localities where the question of the abolution of the wooden shingle has arisen.

The passage of improved currency legislation was advocated in a resolution acting in the capacity of a vote upon a referendum submitted by the Chamber of Commerce of the United States. The resolution further suggested that this measure be endorsed by all the affiliated associations.

The American Forestry Association and its work were heartily endorsed in a resolution on that subject.

Resolutions of thanks were tendered to the retiring president, E. G. Griggs, to the various speakers on the program, to the Kansas City contingent for its entertainment, and to R. A. Long of Kansas City for the reception tendered the visiting delegates at his residence.

Resolutions of regret at the death of William Deary of Potlatch, Idaho, and F. W. Gilchrist of Alpena, Mich., were passed by a rising vote.

In conclusion, R. A. Long of Kansas City spoke briefly, telling in a reminiscent way of happenings at the early meetings of the association.

The meeting then adjourned.

Profitable Lumber Advertising

MEDIUMS

Editor's Note

This is the fifth of a series of articles on how to write lumber advertising, the first being a general article on the subject, the second on "Writing Copy," the third on "Points About Writing Copy," and the fourth on "Borders, Headings and Layouts." The sixth and last, covering "General Points for Advertisers," will appear in the next issue.

Advertising men still tell the story of the value of reaching the buyer by use of the right paper. It seems there was a certain wealthy investor or capitalist who put his money in good schemes or investments. He was a skillful financier and it was difficult to approach him. The story tells that a certain dealer had a large number of bonds in a far-off company. These bonds were perfectly good, but the proposition was so lengthy and full of detail that it would take a long time to tell the story about it. With so much explanation, every effort to get the old fellow to close proved unsuccessful, because the old man would tire when the solicitors got half way through. Finally he wouldn't see any of the representatives. The concern knew that if it could get him to listen to the entire story it could sell to him a good many if not all of the bonds on this issue. One of those real live advertising solicitors dropped into that bond office one day and the concern asked him to make some suggestions for reaching the old fellow. His question, after hearing the story, was, "What paper does he read going home at night?" Like a flash they all got his meaning. This advertising man then posted himself at the entrance of the old fellow's building and saw him, departing, get the Evening Post, if the writer remembers rightly. To make sure, on inquiry to the news dealer he found that the Post was his nightly paper. A few days later a half page was devoted to telling the story of those bonds, and addressed individually to this one buyer. Besides getting a call for these bonds from the old fellow, a number were sold to other people. Advertising accomplished the results by use of the right paper.

Medium Hardwood Record

Contract 1 Year **Size of Space ¼ Page** **Price $ (?)** **Issued Twice Monthly**

Date of Contract Jan. 1913 **Copy Should Be in 4th and 18th**

Issues	Name of "Ad"	No. of Inquiries	No. Follow-ups	No. Orders	Remarks
Jan. 10th	Qtd. Oak				Finally closed by Smith, western salesman
Jan. 25th	Qtd. Oak				
Feb. 10th	Plain Oak				Salesmen- Smith, Jones and H. E. S. (Phone)
Feb. 25th	Poplar				
Mar. 10th	Gum				Jones (Long Distance Phone)
Mar. 25th	General "Ad"				
Apr. 10th					

The same principle applies in the selection of papers for all kinds of advertising. You want to reach the possible buyers, and the selection of the mediums is an all-important task. You wouldn't advertise an eleven hundred dollar piano in a paper that went only to poor people, for instance. Neither would it be a good medium for advertising an automobile. The writer knows for a fact that many campaign failures are the direct results of using the wrong mediums, yet the copy was sales-producing stuff. There is one lumber trade periodical whose circulation is mostly among the sawmills in the South—it has very few consumers on the circulation list. Yet this paper carries a good deal of "consumer-written" advertisements, and it is no wonder that but few inquiries reach the advertiser as a result of his copy. It can almost be likened to "sending coals to Newcastle"—the principle is the same. And, as another example, it's like sending a salesman to sell oak to a mill that is manufacturing that very kind of lumber. Therefore, the selection of the medium should have the very best consideration. If a paper goes to a distinct class of people or trade it will have little waste circulation—such as all furniture manufacturers (no retailers, dealers, wholesalers, etc.). In other words, it is said to have "class circulation." The value of the space is determined by the circulation. For instance, you could pay twice the amount for space in the latter kind of a paper (if you wanted to reach all the furniture manufacturers) than for a paper that reached only a few manufacturers. The other is worth more because it reaches more possible buyers. No "waste circulation" in that case—practically every man is a prospective buyer. For example, HARDWOOD RECORD reaches piano, trim, furniture and various other lines of manufacture and all consumers of lumber, as well as wholesalers. It also has a good mill circulation. You can pick any of the above classes and the rate charged is fair and just.

Now you'll ask how you are going to tell which paper pays best—the one that brings in the most inquiries—when you are using several papers and advertising only one item. That's simple. In nine cases out of ten, a man answering an advertisement puts it right in front of him and follows closely the name, address, etc. He does not as a rule, however, take the trouble to make mention of the magazine or paper in which that particular advertisement appears, and so other means must be taken to identify each inquiry as it comes in. Means of determining this is called the "key system." Lumbermen or other manufacturers would not take the trouble to "cut out the coupon and mail it" (such as is done in the magazines and weeklies), which makes it necessary to use the address or initial scheme. In running a number of advertisements at the same time, the person who opens your mail should have instructions to keep all the envelopes that contained the inquiries, so that when an inquiry comes in addressed to "John Smith, Dearborn Street, Chicago," you should take your check sheet (described hereinafter) and credit a point to the proper paper. If an inquiry comes in addressed to the keyed address in HARDWOOD RECORD, it should be credited to HARDWOOD RECORD, and so on. By keeping these records accurately—and after you once start them it only takes a minute or two a day to keep them up—you will soon know the mediums or papers that it pays you to have your advertising in. By the same method, when you change your advertisement each issue, you can tell in any one paper the advertisement that is pulling the best results. When you find an advertisement pulling well or with especially fine results, analyze and see why it is strong. When you get at the secret, write your other advertisements along the same idea.

The key sheet or record should be regularly kept. It gives you all the information at a glance. At the end of, say, six months you can figure out your cost-per-inquiry and cost-per-orders that you get as a result of the advertising. Even if a salesman gets an order from an advertisement-produced inquiry, it should be credited to advertising. The sample key sheet is the one the writer has always used and thinks one of the best in use. It

gives all the information that a man needs and without having to refer to the letter files to get out the original contract with the paper to set or get points about dates for copy to be in by, etc. It serves as a check on all the advertisements.

There are a few general points in regard to mediums that will assist the advertiser in making this low-sales-cost-per-thousand-in-merchandising-lumber most efficient. Here is another thing to consider and one that is apt to be forgotten. When you are planning to advertise stock that goes only to furniture manufacturers, you should write the copy for your advertisement to suit that class of trade. In other words, just imagine that you are going to address some particular man who is a manufacturer of furniture. Then bring out the points about your stock that you know will interest and help you sell him. Although but a small matter, but few men realize the importance of writing the copy to suit the readers.

The location of your advertisements in the paper (position) is another matter of importance, although but few of you realize it. Advertisers in general have found that an advertisement that is placed on a right-hand page pulls better results than one placed on a left-hand one. None of the class mentioned gives any reason for this statement, but the writer has found by studying the methods of people looking through a paper that they lay the right-hand side of the paper or magazine flat, and roll the left-hand side. This conceals that side somewhat, and as a consequence, unless the advertisement is a half-page one, it is not always seen. Again, your advertisement placed on the outside column commands more attention than one placed inside and next to the binding. Therefore, if you have a quarter-page space, specify, "Outside column, right-hand page"—then you are assured of having your advertisement in view, and it is then up to you to hold the reader's attention with interest-compelling copy.

The character of the reading matter that a paper publishes should have the prospective advertiser's attention. Does the paper cater to its readers in that it publishes articles and reading matter written by "men who are authorities" and who are qualified to give their opinions? Does the paper pay these contributors well?—if it does not, it cannot hope to keep them as writers. There is too great a demand for good writers, and unless good rates are paid the paper cannot hold its staff of contributors. Are there evidences of interest in the shape of letters, testimonials, etc., that come unsolicited? Is the editor or his assistants biased in any way on any subject? Is the paper full of personal "puffs" that make the reader feel as though he had been tricked when he reads them? Is the paper one where an exchange of views is looked for on all sides; where questions can be threshed out and where the editor will publish all—not only one side, because he happens to be prejudiced in favor of one side?

The writer does not believe in placing advertisements in large and voluminous trade papers and those that are published too often. It is too much to expect of the readers to try to wade through all of them. The papers that are small, concise, deal with points bearing only on one phase of the business instead of it all in general, and that come out once or twice a month, are most desirable to advertise in. Again, class circulation enters into the matter. It is not so much the total circulation of the paper—a point that some trade papers make a special boast of—but the number of possible buyers of the particular goods to be advertised. Always keep this in mind, and when the representative of a newspaper comes into your office to sell you advertising space, ask him, "How many trim mills in Pennsylvania, New York and Massachusetts do you reach?" or, "How many hardwood consumers do you reach?" By bearing these suggestions in mind and treating the question from a business viewpoint, you can soon tell whether the paper will serve your purpose or not.



The Business of Government



Editor's Note

The following address was delivered by Alfred B. Cruikshank of New York City, before the National Lumber Manufacturers' Association in session at Kansas City, Mo., June 3 and 4.

I have come from New York City to address you today by invitation of your officers upon a subject selected by them with a title proposed, I think, by your secretary, namely, "The Business of Government and the Government of Business." No general subject more worthy of the attention of American business men at this time could possibly have been selected than this; for government in this country of our is, or ought to be, principally a business affair and conducted in a business way; but unfortunately, instead of directing themselves to the business of government, the politicians in charge of governmental affairs are misapplying their energies to the government of business. Not merely to the government of business men, not merely to make them behave properly, to refrain from violence and cheating and to render every one his due—that is the legitimate function of government—but government here is now more and more endeavoring, as other governments have endeavored over and over again in days gone by, and always without success, to rule business itself; to replace the ancient maxims and usages of trade by political sayings of the hour; to enact arbitrary laws to govern its operations instead of the natural laws which business itself evolves in those operations. Now, there are many men in this country who believe that the only laws which government should apply and enforce in business transactions are the laws which business itself has produced and recognizes as binding; there may be others who are willing to have these business laws artificially modified or restricted by the lawmaking power; but I am sure you all feel, and that every reflecting business man feels, that legislation and government administration affecting business methods, whatever it may be, should be planned and carried out by those who have a thorough, practical knowledge of the subject and not as at present by students of theories, amateurs, political quacks and time-serving place hunters. I heard President Wilson say during his canvass that business was meddling too much in politics. He was mistaken; the opposite is the case. Business has had too little, not too much, to do with government. Certain special interests have meddled too much in politics. They have been tempted to take advantage of this very interference by government with the laws of business in order to obtain political favors for themselves, whether tariff legislation or whatever it might be. This was politics, not business; for in true business there is no favoritism, whereas politics is all favoritism and nothing else.

Now, the best way to keep special interests and crooked business out of politics, and the only way, is for legitimate business to step openly in and expel crooked business from legislative halls. The subject is not a new one to the thoughts of any of us. For many years I have discussed privately with my friends, as no doubt some of you have done with yours, the sad conditions in which government in this country is being carried on. And now I believe the time has come when business should take hold of politics, not only to secure its own rights, but to reform politics in the interest of the whole nation. It must be clear enough to every practical man familiar with the subject that one of the principal causes of the present political degradation is the absence of representative business men from the councils of the nation, and the want of the application of business principles and business methods in the conduct of government. And I have come today to present to you, as representative business men, an argument in favor of the immediate

inauguration of a movement for the political salvation of the commonwealth by the only method which appears to be practical today, and that is by the enrollment of the business men of the country into a political organization whose purpose shall be to exert a controlling influence over legislation and administration within the domain of the federal government, and, as far as possible or necessary, of every state, county, town and community, so as to shape its policy and practical operations in accordance with natural law, and so far as relates to business matters to see to it that the same are conducted in the interest and at times seems hopeless of remedy. The nation has been endowed with wonderful natural resources and a beneficent climate; it has an industrious and intelligent population and every blessing imaginable except a good political system. Our political system is anything but a blessing; it is notoriously wasteful and corrupt, and the administration of our cities is said to be the worst of business and of business men and to the increasing and strengthening of commerce, manufacture, and industries throughout the United States, and not, as is now too often the case, in a way to discourage and injure those enterprises.

You all know the deplorable political condition of this country and how that condition has lasted for years in the civilized world. How business is practically affected by this state of things you are also well aware. The American people is a business people. In art and in science this does not take the front place among the nations, but yet its civilization is, taken on the whole, probably the highest in the world, and this is due entirely to its business life, and its business men, who are the creators of the truest and most far-reaching civilization; namely, that which reaches the greatest number of individuals and the largest number of homes. The business men of our country are its life and glory; through them its people obtain food, sustenance and clothing; the dwellings in which live and are sheltered the children, women, politicians, grafters, demagogues, blatherskites and all other non-producers, whether or not they recognize their obligations, are built and largely paid for by them; all the institutions of learning, benevolence and religious, are of their providing; without them the country could scarcely exist, and through them it lives and is prosperous.

And yet American business men are not free from hour to hour from the fear of assaults upon them, and upon the system they have built up and the work they are carrying on, by ignorant, corrupt and stupid politicians and the legislatures and administrations under their control. By means of ill-advised and wasteful expenditures, foolish and oppressive taxation, quack and ignorant legislation, stupid administration of government and judicial machinery, improper appointments to office, frequent and unnecessary changes in laws, rules, ordinances and procedure, and general careless and incompetent management, supplemented by occasional rascality, the whole extending over a long period of years, our government system has been brought into just contempt, and not only have business and its votaries been harassed and plundered, but capital has been so alarmed and annoyed that its employment has been seriously hampered and the business hopes and future of the country have been interfered with. Our government is absolutely grotesque in its inefficiency. Pretended lawyers who are really inferior political adventurers or the favorites of politicians are placed in offices which they are utterly incompetent to fill. The cabinet officials are nearly always political lawyers without previous training or experience in the departments over which they are placed. It is related of one secretary of the navy that when he went on his first official visit to a warship he burst out into astonishment, saying, "By golly, the darn thing is hollow." Next year the same man might be made secretary of the treasury. Dozens, scores—aye, hundreds—of new laws are passed yearly by legislatures the majority of whose members are ignorant of their intent or meaning. During the Civil war Congress passed a law abolishing sales of gold on the exchange; a panic was produced and they repealed it next week, in absolute ignorance of what they were doing either time. When political mismanagement results in a great scandal, reforms are loudly promised and, the rumpus over, everything goes on as before. Day by day capital is threatened and scared away, and when business seeks redress it must actually purchase fair treatment or stand hat in hand in the anterooms of legislation while politicians decide its fate. The legislation of the country has of late years become almost entirely business legislation and the old parties are incompetent to deal with it. All the remedies designed to make the party system decent and efficient have failed and will all fail.

Neither the masses, through referendum or otherwise, nor their party representatives, are fit to legislate on business proposals. What is needed is that the business men of the country cease to divide their vote between the old parties, cut loose from them altogether and organize, not a new political party, but a business men's union or federation, which, extending through all the United States, shall dictate to all the political parties and change this government from a corrupt political machine into a clean business institution. You have often admired the fathers of 1861 or the great-grandfathers of 1776; you can do as much as they did to redeem your country for your children. Aren't you tired of hearing of the corruption of American politics? Aren't you ashamed of reading of officials being sent to the penitentiary, of seeing your representatives in stripes, of reflecting that you elected them, of being told and feeling in your hearts that they are no worse than others who escape, and that they are merely the product of a wretched system? Doesn't it nauseate you to be compelled to read in the newspapers day after day appeals to this or that prominent man behind the bars; that your city is under the control of a greedy, criminal boss; that your aldermen are thieves; that your police officials are blackguards and ruffians; that everywhere is graft, graft, graft, and that the whole political mess smell foully to heaven? Aren't we all ashamed as Americans to see incompetents in high places, to have this or that state represented in the United States Senate or the governor's chair by a worthless politician; to read now and again in the daily papers the report of a public utterance by a high official which all intelligent men and even the newspapers repudiate as utter nonsense? And if so, aren't you willing to turn in and help clean it all up and be the helpers in making this country what it ought to be among the nations of the earth? If you are willing, you can do it. I say you, because you are representative men, you are strong men, you are moneyed men, you are business men, and what you believe in and undertake other similar men will believe in and follow.

Here I might well stop and leave to some of you to work out if you care to the details of a remedial movement appropriate to the situation, for I am only a practicing lawyer, and though not entirely without means or practical experience, I can not compare in either with any of you gentlemen here present, and you are all supposed to know better how to proceed in such a matter than a professional man like myself. But I may, perhaps, go as far as to sketch roughly the outlines of the project I have in mind, and to answer some possible objections to it. For, after all, the whole plan and scope of such a movement can not be foreseen; it will take shape and develop as time goes on.

What is needed and all that is needed is a patriotic business organization founded on the principles I have outlined and committed to the object dear to us all; namely, redemption of the whole American political system from the twin vices of corruption and inefficiency. To have any influence in politics you must be organized. First, for the effect on yourselves, so that you may be led to think in harmony; to select the objects for united action and to act together in an enlightened way; and, second, for the effect on the politicians who respect nothing that is not organized, or at least concentrated so as to be made effectual. We have all heard of the legislative influence of the Grand Army vote, the labor vote, the church vote, which are more or less organized, and of the Irish and German votes, which are somewhat concentrated in various ways. Now let us have the vote which will really count for something of value—the business vote.

Its primary organization in villages might consist of business clubs, including all the business men in the locality. In cities the different branches of business might be organized, each after its own fashion. It should include in every town, city and county substantially all the merchants, bankers, brokers, manufacturers, insur-

ance men and their clerks and subordinates; all employers of labor; all capitalists, large and small, all professional men in sympathy with those; clerical employes of public utility corporations, and all others with vision enough to see where their real interests are. These various clubs and societies might be federated in a state organization with a basis of numerical representation by delegates. The local organizations would find ample scope for their efforts in local affairs, where their activities would tend to keep alive their interest in the movement. General public questions could also be debated and discussed, and papers read, published and distributed, and other means of local instruction adopted. To be a delegate from one of these trade or local clubs to the central state assembly would be considered a distinction; and to be president or other officer of the state organization, or even to be chairman of the state committees, would soon come to be considered a high honor. These delegates and committeemen would, of course, be glad to serve without salary and even pay their own expenses in attending the conventions. But this would only be the beginning; the organization once achieved, means would have to be taken to investigate and report on economic or business facts in a scientific way and so to instruct and enlighten business public opinion that it would be able to give to itself authoritative and clear expression. One reason why the business community has not obtained the hearing of the nation is that it has not furnished itself with a proper voice. The voice must speak before the ear can hear. Each of these state bodies, working through its committees and by correspondence with the various business clubs, etc., would be able to collect an immense amount of valuable statistics and information. When legislation was proposed touching business interests, such as transportation, employers' liability, income tax, inheritance tax, corporate supervision, etc., the business community would be able to speak with united authority and its voice would be listened to with respect. Such legislation as might be proposed by a state business federation would be seriously considered and in most cases would undoubtedly be enacted. On the other hand, self-seekers and corruptionists pretending to represent business at the capitol would be quickly exposed and would get but scant audience; while prominent business men of the community might be especially honored for good work done in the cause or in the public service by public dinners or receptions given by the organization and thus your leaders be rewarded while public interest in the cause was stimulated.

In proposing a state business organization or federation one is naturally led to think of the labor organizations and the influence they have exerted in legislation as illustrative of what can be done in that way. Where the demands of organized labor come in conflict with those of enlightened business requirements it will be well that business interests be officially represented in the legislature. But such collisions would be unlikely, because every enlightened representative of labor can be made to see that the interests of laboring men and their employers are identical except in the one matter of wages, with which legislation has no more to do than with any other form of exchange. And labor ought to be and is interested in increasing the opportunities of business, for that is to increase the demand for labor.

A necessary development of the idea would be a national congress of business and a national headquarters at Chicago, St. Louis or elsewhere, with a staff which could be employed collecting information and digesting it for the general benefit. All these details would be well worked out, because it is the nature of business to organize and to organize effectively and intelligently, and it is never at a loss for means to accomplish what it desires.

The association should also carry on its propaganda by means of newspapers, magazines, pamphlets and other publications and public discussions and would ascertain, collate and display facts so as to educate its own members and influence public opinion. It might in time have a paid staff of experts. It should be the enemy of corrupt and ignorant office seekers everywhere, and its efforts should not cease until that class had been eliminated and excluded from public service. It might or might not itself make nominations to office, but its approval of such nominations would be eagerly sought, and by means thereof it would elevate the standard of official capacity to a high degree. Another result would be that the business community would not only get the hearing which is now refused it or given but grudgingly, but it would in all matters within its domain dictate the public policy both in legislative halls and in administrative offices. Even the individual business man who found himself oppressed by any of the government agencies would have a place to go where his complaint would be properly heard and investigated, and if well founded a remedy would be demanded in a voice powerful enough to command attention.

Let no one fear that such an organization is not practicable. See what Parnell accomplished in Ireland, where, without prestige and almost without means, he created a league which obtained complete control of the island and forced the British government to change entirely its policy toward the Irish people. Look at what women have done, who without the vote and without any real grievance or substantial object, by mere force of organization and persistence, have obtained the suffrage in a number of states, though having nothing but ignorance to contribute to the situation, and though to them it is a matter of mere sentiment, and sham sentiment at that, while the matter we are discussing is to the business man one of vital and practical importance.

It may be objected that our system of universal suffrage and the old habit of party voting will defeat this project, but it does not seem so to me. The ordinary voter is not opposed to business interests; he is merely ignorant of what they are and what they represent. He is tired of the rule of ignorant and selfish bosses and would be glad to see them replaced by leaders of principle and progressive ideas. But the majority of voters are incapable of organized movement. They will neither help nor oppose us. They are in fact indifferent on all public questions, and can scarcely be induced to vote except for or against some individual in whom they are interested. It is not true that the ballot or universal suffrage makes us all politically equal. By many the ballot is seldom used and by most the primaries and other preliminaries are entirely neglected. So it is with the right to petition the legislature or appear before its committees. The ordinary citizen never avails himself of that right. Political equality exists among those only who are equally energetic and influential in political life. It is absurd to say, for example, that the ordinary voter has the same political power as such a man as Theodore Roosevelt. It is equally absurd to say that the members of a business organization, such as I propose, would be overcome by the inert opposition of many times their number of indifferent citizens. The fact is that the mere organization of such an institution would have such an effect that its demands would receive speedy recognition in all departments of the government and be treated with the highest respect from the beginning in all political circles.

We need not even fear the machines. Why should the machines defy the business men when arrayed for political battle? Where will they get the money? It is with your money they run their campaigns. Where the vote? The labor unions care nothing for the old machines and the farmers very little. See what happened to the bold Republican party the other day when attacked by a live man. And there are better and abler men in the ranks of business today than Theodore Roosevelt. I believe that the vote represented by such a business federation would be enormous. Thousands and tens of thousands of intelligent men have adopted the sad alternative of not voting at all or of voting but seldom, and taking no part in the rotten primaries to which they receive a hypocritical invitation, but where they know they would never be welcome.

Those of them who actually vote for one party or the other do so because they find there is no other choice. How gladly would they flock to the standard of decency and intelligence in politics should one be raised to which they could repair!

There need be no fear of deficiency in funds necessary to support such an enterprise. By far the larger part of the wealth of the country is engaged in some form of business enterprise and controlled by business men, and all, from the richest banker down to the smallest retail merchant, ought to feel and would feel interested in so valuable and important a work. Surely the business men can

do better than the Socialists, who on a contribution of twenty five cents per month each carry on a constant propaganda. Nor need there be any fear but that able and disinterested men would be found to give their services as far as would be necessary. Such a man as J. Pierpont Morgan, were he living, would feel honored by the presidency of a national association of business men, and would take pride in guiding its policies and in contributing his valuable advice and moral support. And although he is no more there are in the business world of the United States thousands of capable and disinterested men who would gladly give their services to the business public if required, though their dignity and modesty are such that they will never be found among the ranks of office seekers or publicity hunters.

It may be said that there is no need of such an organization as I propose; that the intelligent vote of the nation is sufficient for the protection of business. But what is the intelligent vote? The newspapers, of course, say it is the reading vote, the vote of those who read books and newspapers. As far as newspapers go that would be true if it were a matter of retailing gossip about crimes, elopements and other scandals; or, were it a question of passing examination for a teacher, college preparation or book study would be the thing. But the vote in a business community, such as that where most of us live, requires some actual knowledge of business affairs. The proposal to be voted on may relate to a tax upon a special industry, or a public loan or system of banking, the building of a state canal, or encouraging railroads or other public works, or the chartering of great corporations. The intelligent vote is that of the man who understands such questions as these and has experience to guide him; who has something at stake to quicken his judgment and is accustomed to think on the line proposed. In a word, a business man or one of the class of such sensible people as take counsel of their business friends, for every well informed man knows that when business is prosperous the farmer, doctor, laborer and all are prosperous and that the main object of government is to promote the public welfare, as our constitution says, and not to promote the distribution of offices among humbugs, nor to amuse fools with the ballot.

This is no trifling matter. It is not as serious here as it was in France in 1793, when the government was handed over to theorists, petty politicians, demagogues and adventurers. It was by such men that the guillotine was created. Robespierre was a country lawyer; the rest of that gang were without business training; and so in that ghastly time the laws of business were ruthlessly swept aside; government undertook to make prices, and to fix wages with a minimum and maximum; summary proceedings in the courts took the place of trials, and the horrors that resulted have never been adequately described. The situation here is not as serious as it is today in Mexico, which I visited a few months ago, and where the miseries that are being daily suffered and the hopeless condition of the whole country are to be ascribed to a system of universal suffrage which practically deprives business men of all share in the government of the country. This is the true cause of the deplorable Mexican situation, though you would never learn so from the newspapers, that are enjoying their usual dense ignorance upon the subject. But though Uncle Sam is not so ill now as Johnny Crapaud was or our Mexican brother is today he has a light attack of the same disease and needs treatment.

It may be suggested that the majority of our legislators and office holders are lawyers, and that lawyers are better adapted to the making of laws than business men. But those alleged lawyers are usually not real lawyers, but politicians who have been admitted to practice as lawyers at the early age of, say, twenty-one, and shortly thereafter have turned their attention to small local politics. Thenceforth they are neither good lawyers nor good politicians. By those who fill the high offices of the nation no doubt law should be studied, and so should political economy and other topics connected with government. For legislative purposes there should be a board of hired legal counsel to examine every proposed statute and compare it with previous enactments and see that it is in good legal shape. Good legal assistance can always be obtained if necessary. But the foundation should be a good practical business training; nothing can take its place.

The business man brings to every problem the human element which nothing but actual experience in dealing with men and the troubles of men can provide. Bismarck once said, "Put Germany in the saddle and you will see that she can ride"; I say put business in the saddle and you will see that it can ride. See what it has done already for this country. Is it not true that the growth of this country and its prosperity are due almost entirely to the work of business men in practically applying inventions and discoveries to everyday life, and the enterprises in railroad building, manufactures and commerce, which they have inaugurated and carried on? Bankers and other business men furnished the money which paid and fed the soldiers in the war for the Union. Business men have brought the stone from the quarry, the wood from the forest, and worked them into dwellings, churches, theaters, halls, hospitals, libraries and colleges, that are the centers of our daily life, and into the furniture and equipment that make them habitable. In the great cities they pay our teachers, professors, clergy and scientists. They bring from all parts of the earth varieties of food that go to nourish and create the body, blood and brain of man, and develop him from barbarism to civilization; they enable us to travel in comfort and luxury all over the world, and clothe us so that we can live in any climate; they light our abodes and warm our hearths. Business has endowed our great institutions of learning and benevolence, and finally has given us all that makes life enjoyable. It does this all by an organization, financial and commercial, which is the growth of centuries; which by a study and adaptation of nature, human and otherwise, has created its own customes and laws, and the financial system, whereby the work of each is advantageous to all, whereby the benefit of the toil of the laborer or a lawyer in Calcutta is made available in America; whereby a debt due in San Francisco can be paid in London; whereby the savings of one man can be used by another, and those of a thousand men can be pooled and made available for any useful project or work of benevolence; whereby the beat of a sympathetic heart in Kansas City can be made to relieve a sufferer in Portland, Me., and the whole nation is bound together in ties of mutual aid and general prosperity. Our era of civilization is the child of business enterprise. It has created the commercial machine which converts the raw and cheap products of remote nations into the refined and precious food or adornment of millions who never saw or imagined the scene of its production. And all this by means of a system of banks and banking, clearing houses, exchanges, credits, discounts, premiums, advances, deposits, drafts, syndicates, underwritings and other financial machinery so vast, intricate and complicated that the ordinary handshaking statesman of the Bowery, the capital or the prairies has no more conception of it than a Blackfoot Indian has of a power house electrical equipment.

LABOR'S REAL RELATION TO BUSINESS

The labor leaders and socialists tell us that manual labor produces the wealth of this country. That is a mistake. Labor is the hand; business the head. Labor alone may produce the cheap raw product, enough merely to sustain the existence of the primitive man, but only as the servant of business, and under its direction is it able to turn that cheap product into merchantile wealth. It is the directing mind and oversight of business enterprise which finally multiplies it a thousand fold, distributes it all over the world, places it in every house, and even changes it from a destroyer into a benefactor, as when it takes the destructive ice masses from the frozen North and breaks them into fragments to cool the drink of the fevered patient in the tropics. In a word, business enterprise creates and maintains the civilization of the world. Labor alone can not support itself according to the civilized standards of today; it lives off the offerings of the business world. For every cup of coffee the laborer swallows and for every piece of meat he eats in this city, or in any city of the United States today, he is indebted to business enterprise and business organization. And what do we not all owe to movable capital, that wonderful and indispensable instrument of civilization and progress, which scarcely existed a few centuries ago, which has been created, nurtured and conserved by business men, and whereby all the accu-

mulated surplus earnings of the past are turned into an enormous movable fund, available to the present use of the whole population of the earth.

The business men of the world have accomplished all this modestly and quietly year by year, generation by generation, in the face of the obstacles of individual rascality, wars, pestilence and casualty, governmental tyranny and general stupidity; by a careful daily and hourly study of facts and of the laws of nature; by conformity thereto, and by practicing those virtues of honesty, industry, frugality, economy, prudence and self-denial which are the foundation of all the material good in this world, added to a courage and enterprise which has never received its due meed of praise, and never will. Nor is this all that business men have given the world. For as I count as business men the practical inventors of all ages, all those who have applied inventions to the practical benefit of mankind. Therefore, I claim for the business world credit for the great inventions of the printing press, spinning jenny, sewing machine, steam carriages, Bessemer steel, harvesting machines, electric telegraphs, telephones, motor cars, and all the countless minor inventions which have made our present civilization possible.

The spirit which has brought about these glorious results is the spirit which I long to see in control of our governmental affairs.

BUSINESS SPIRIT VS. POLITICAL SPIRIT

It will not be enough to give us business men in office as the result of political bargains and by nomination of political parties. Such are often as bad as pure politicians, or worse, because they are apt to be business degenerates—men who, to get office, adopt political methods and are filled with the political spirit. No. The whole tone of public affairs should be changed and the political spirit which now pervades public life should be replaced by the business spirit.

What is the business spirit, and wherein does it differ essentially from the political spirit? In many respects, but notably these: The business spirit is scientific and exact; it seeks to ascertain the actual law, whatever it may be, and to follow it. It seeks justice, it understands the principles of exchanges, wherein both sides always benefit, and which is the foundation of civilization; whereas the political spirit is one that seeks to satisfy the ignorant demand of the hour and foolishly tries to force nature, human and otherwise, by arbitrary laws.

What this spirit of business enterprise can accomplish when infused into government service we have already seen partly illustrated in the digging of the Panama canal, and to some extent in the postoffice service. The business idea is to abolish arbitrary statutes and restrictions on human endeavor and to replace them by its own mild and beneficial rules and maxims, which are merely the natural creation of human activity. Such are those establishing the mutual relation of supply and demand and enacting that labor, thrift, enterprise and invention are beneficial to the community, and that if you want them you must encourage and reward them, not tax them and penalize them or the fruits of them; that authority is to the competent and experienced, and that therefore neither a factory, bank, ship or other enterprise can be properly managed by the votes of the workmen, clerks or passengers. In a word, the business method is to ascertain the natural law, and to follow it. The business man will not make the mistake of saying that the right of inheritance or disposal of property is created by a statute and can be taken away by law; and he knows what to think of the man who says so. He knows that the desires for marriage, for the family, to acquire and accumulate property and to protect and nourish one's children in life and after death, all spring from natural law; that society can not exist without such desires and instincts. You might as well say that the child is the result of a statute as that its parents' right to care for it is created by statute.

Lastly, it will be objected that my scheme involves class legislation; that it gives too much power to the trading class. There is nothing in this objection. The wealth, the property of the country is mostly in the hands of American business men, and nine-tenths of the legislation and administration affects their interests directly and other interests only indirectly. Nations no longer exist for war purposes; at any rate, this nation does not. It exists for business purposes, and should be administered accordingly. The object of interior government is only to keep order while the community transacts business, and the principal purpose of the departments of foreign affairs, the army and the navy is the protection and extension of foreign commerce. The Postoffice, Interior and Treasury departments are business institutions. As to labor, that has its own problems and its own battles, and so far as it is in the right it has all our sympathy; but it is learning, and must learn, that it is only an inferior department of business and that its prosperity depends entirely on that of the business man.

You will be met by a deal of absurd chatter about the rule of the people. The cry of the demagogue is, "Let the people rule." In fact, the people never rule, do not know how to rule, and don't want to rule. The only American rule is a rule of law; what is called personal rule is merely the administration of public affairs, and that is always in the hands of a class. It is now in the hands of a class of small politicians and newspaper men, largely an incompetent and unscrupulous class. It ought to be in the hands of the business class for the same reason that the navigation of a ship should be in the hands of experienced mariners. I am not afraid, therefore, to say frankly that I would like to see this nation openly and avowedly a business nation and its government a business government shaping its policy on business principles. If that day comes it will be because business men have seen the light and have gone forward and boldly seized the helm of state.

The time is ripe for action in this direction. A blow has been struck already, and I am glad to be able to say it was by a lumberman. I understand that within a few weeks Governor Hodges of Kansas sent a message to the state legislature advocating the substitution of a state government by a single body of nine to seventeen members, to hold office for four or six years, to sit as often as public business requires, and to be paid salaries large enough to enable them to devote their entire time to public affairs.

We hear a lot of talk about social unrest; and timid, excitable or sensational people, among whom I regret to see the vice president of the United States, are running about hinting dark hints that the country is in danger of some fool revolution or other. They pick up this talk from labor leaders and out of yellow journals. It is all rubbish. There is dissatisfaction, of course, and always will be, but there is no more unrest than there always was. We are dissatisfied ourselves, but we only want to improve matters, and so do the other agitators. The great majority of families in the United States have some property, and every member of a family with property wants property rights protected. What the people see is that the present governmental system is behind the times, and they want it to catch up. To fetch it up to the time is a business man's job; it is your job. And you must arouse yourselves to take hold of it or suffer the consequences.

You must develop and foster a class conscientiousness; a feeling that the interests of business men are one in all matters affecting business in general, and business men as a class; a realization that business men of all varieties, bankers, manufacturers, wholesale and retail merchants, insurance men, etc., and all their clerks and subordinates, and all the large number who are connected with business in various ways, such as commercial lawyers, surveyors, civil engineers, etc., constitute one body and one set of interests and activities. This will take time, but it can be done, and it is well worth while. That feeling once created, the rest will follow.

We once claimed to have the best government on the face of the earth. We no longer make that boast. But we can have it yet. We can have the best government that exists, or that ever did exist on the planet, but we must earn it as our fathers earned what they got. As they earned their freedom from the domination of the mother country, we must earn our enfranchisement from the control of ignorance and corruption; they went to the root of the matter once and twice by abolishing old institutions which had become offensive. Then, as now, common sense said do it; custom and laziness alone forbade. No doubt they hated to make a start as much as you do, but you should make it as they did.

Practical Timber Conservation

Editor's Note

The following is an address delivered by Capt. J. B. White of Kansas City, Mo., before the annual convention of the National Lumber Manufacturers' Association held in that city, June 3 and 4. Capt. White has a nation-wide reputation as a sponsor of conservation.



J. B. WHITE, KANSAS CITY, MO.

The conservation of all natural resources means much for the present and for all future generations. To protect and save from waste, to plan and establish a policy which shall insure a sufficiency for those now living, and at the same time provide for those who shall succeed us, is both a public and a private duty. It is that unselfish principle of right and wholesome economics which insures prosperity to the nation and peace and plenty to the individual. No system of government is right which produces waste by providing extravagant excess of luxuries for the few and makes it impossible for the many to get the needed comforts of life. And no system of government is right which does not render it easily possible for our children and our children's children to obtain the use and benefits of a sufficiency of all these God-given natural resources. The old questions of "Am I my brother's keeper?" and "Who is my brother?" which were taught two thousand years ago, must be answered in enactments of law which will automatically enforce these humane principles when we forget.

There are natural resources that can be acquired and reproduced, some by annual crop growth and some by much longer periods of crop growth. There are other natural resources that, though abundant for this generation, are limited and cannot be reproduced. All food, clothing and wood products can be regrown. The mineral and metal products cannot be reproduced. Air and water are inexhaustible. Wood products have many substitutes for the construction of dwellings and other buildings and for various mechanical purposes. Steel and concrete are the prevailing substitutes. Coal, oil and gas have electricity as a substitute for heat, light and power. Electricity is most economically produced by the water power of the country, and is made the agent of extending and transmitting the energy of this great natural resource to great distances by electric wires running in every required direction. There is going to waste, on its way to the sea, enough water power in this country, if harnessed and converted into electricity, to light and heat the homes and turn the wheels of the factories and run every street car and railroad train in the United States. These water power sites on the public domain should be held for the people and leased for their benefit to power companies at a fair rental. The state can condemn private property for public uses under the right of eminent domain, and sites not on state waters and not now utilized should be acquired by the state for the use of the people. This water power of the rivers and streams can be used over and over again, being multiplied as many times as the water can be raised by a succession of dams. Thus, while the wheels do not turn from the water that is passed, other wheels all along the stream below do turn, and then the sun pumps the water back again to its source, and the same process is endlessly repeated.

The practice of forestry and the conservation of our timber resources are of immense importance, not only for the intrinsic value of the wood and the lumber, but also in many parts of the country for holding back the snows and storing the waters at the heads of the streams in the mountains, thus preventing disastrous floods in the country below.

It is safe to say that in all questions relating to the forests and to the timber industry—whether it be tree cutting, tariff or taxes—they should be judged and settled by and to the best interests of conservation. If the settlement of the question retards conservation, then the judgment is wrong; if the settlement of the question advances conservation, then the judgment is right. It is ruinous to conservation to make its principles and policies political party issues, for they should be accepted as necessary public principles for all political parties for the benefit of the whole country.

The conservation and development of the natural resources of human life, of soils, of forests, of metals and minerals and of water power and waterways, is a function as properly belonging to the government for this and future generations in a large way as for the individual citizen in a smaller way. Its principles are as sound and axiomatic as is the principle that is laid down in the Golden Rule.

But who shall plant lumber trees? Who shall practice forestry? The planting of fruit trees is a commercial business, as they mature and bear fruit in from four to twelve years. Capital invests, choosing favorable soil and climate, and the harvest comes two score or more times during the lifetime of him who plants, and he sees and enjoys the fruit of his labor. But with lumber trees there is only one crop in a generation. As an investment it is not as attractive, with laws of taxation as they are now, as other opportunities which long experience has proven less hazardous. One must figure compound interest—at, say, six per cent, to make it safely attractive—cost of cut-over lands, cost of setting out trees and caring for them for fifty years, annual taxes for fifty years before the crop is harvested, and taking chances as to the value of the stumpage at the end of that time.

The following is a statement handed me by the Hon. Mr. Hardtner of the Forest Commission of Louisiana, showing the calculations of the commission, figuring the value of cut-over lands at $3.00 per acre and on the basis of a thirty-year period.

Assessed value for thirty years at one dollar per acre and compound interest at 6 per cent	$ 1.67
Cost of land	3.00
Cost of planting trees	5.00
Compound interest for thirty years at 6 per cent	37.94
Care of timber at two cents per acre per year, and compound interest at 6 per cent	1.67
Total	$49.28

It is estimated there will be 5,000 feet per acre in thirty years' time at a cost of about $10.00 per thousand feet. In order to induce people to practice forestry the state has enacted a law that the assessed valuation for thirty years shall be only at the rate of $1.00 per acre. To obtain the best results by intensive forestry one cannot properly trim and care for trees at two cents per acre per annum. That is, it will pay to spend more on this work,

possibly for the entire thirty-year period a total of $10.00 per acre, thereby easily obtaining in forty years a yield of from 10,000 to 15,000 feet per acre. Figuring that money doubles every ten years, if interest and expenses are compounded at six per cent, this would make the timber cost at the end of a forty-year period, with a yield of 10,000 feet per acre, $11.50 per thousand. I believe that land in Louisiana can be bought that will in fifty years produce an average of 20,000 feet per acre, and with favorable taxation for the entire period at a cost of $10.00 to $12.00 stumpage, according to the quality of soil and the cost of land as to its value for other crop purposes. The tax should follow the saw at the harvesting of each crop.

In European countries it has been found most economical that the government or state shall grow the forests. The state pays no taxes, can get money at a lower rate of interest, and can establish and maintain a uniform system of forestry under the charge of educated and trained experts. When the crop has matured to a point where cost has met value of product, so that it would be a sacrifice of profit and a waste for even the state to maintain carrying charges, then the trees should be harvested, the land grubbed of its stumps, and the process repeated for another crop. It is surprising how much can be grown on an acre by intensified forestry, where trees of the same age are planted in rows or at proper distances from each other, according to contour and nature of the ground, and are intelligently pruned and tended.

On the Pacific coast it has been ascertained that 1,000 feet per acre per annum can be grown, or 40,000 feet per acre in forty years. In the Vanderbilt forest near Asheville, N. C., I saw stands of white pine ten inches to one foot in diameter which had been grown from the seed in eighteen years. In the different states such soil should be selected for forestry which is not so well adapted for annual crops of agriculture, yet well adapted for tree growth. And the work should be done by the state.

A lumberman may be a good mechanic and a man of excellent judgment as to how to cut and saw the tree into lumber so as to secure the greatest commercial value, yet he would not necessarily make a good forester. They are two distinct occupations. It is most naturally the province of one to furnish the capital and skilled knowledge to grow and care for the forests and to then dispose of the raw material to the other, the skilled manufacturer, to prepare for the market. We can never make it profitable to grow trees to an age of the present old-growth forests of one hundred and fifty years or more. But these old trees have obtained their growth; they have long been ripe for the harvest, and a rapidly increasing population and the demands of other countries are calling for the marketing. Most of this acreage is not improving. In most instances, at the best, it is only holding its own. Growth of mature trees has stopped, and trees are dying to fully offset the gain of new growth; and when fires come both the old and the new growth are swallowed up in flames. The Forest Service is doing most valuable and valiant work in protecting and saving the forests from disastrous fires. The government appropriations for this work should be most liberal and should be supplemented and aided by appropriations and appointment of sufficient forces of forest field men and fire wardens from each state.

We are far behind the older nations in the practice of conservation, but we have awakened in time. It is not now too late to care for the present and insure for the future. We have had too great an abundance. In the early history of our country we had to cut down the forests and clear the ground for farm crops; now we have arrived at the point where we must conserve and improve the soil and plant and care for the forests. We are going to become great through thrift and saving, and our people shall not want. Not any one class, but each and all should bear their just share of the public burden of conservation, restoration and protection, and every class of property should be taxed fairly for the public cost in this great work of the present in providing for the future.



Trend of Hickory Manufacture



Some peculiar features about the manufacture and marketing of hickory have developed lately—some drifts and tendencies that seem at variance with the logical order of things.

One of these is the more general practice of cutting up hickory logs into flitches and planks, and marketing them in this form instead of reducing them to wagon axles and to specific dimension for agricultural stock. For two years or more this drift has been noticeable among sawmill men who get a certain percentage of hickory in their hardwood logs. Some who a decade ago were making a strong feature of axles and other dimension stock in hickory, and bolsters and kindred products in oak, now do but very little of this. Instead of reducing stock to specific dimension as formerly, they cut it into planks and flitches and let the customers reduce it to specific dimensions. This tendency is very noticeable in regard to hickory, and to some extent oak is following along the same line.

About the only explanation the millmen talked to on this subject have given for this is that they find it more satisfactory. Now and then one may find a more detailed explanation to the effect that at one time the price of hickory axles was higher compared to the price of lumber and flitches than at present. The price of axles and hickory dimension stock has increased some in the last ten years, but not in proportion to the price of hickory logs and hickory lumber. This is, perhaps, the main reason why many hardwood millmen are now cutting their hickory into planks and flitches in preference to reducing it to dimension stock. Another reason, perhaps, is that they do not get as large a percentage of hickory now as formerly and do not consider it enough to justify going into the detailed process of converting into various dimension so as to use it up advantageously. They are simply flitching it and letting the consuming trade reduce it to dimensions, and take care of the scrap and trimmings as they may see best.

What may be another factor is that a few years ago the larger consumers of hickory effected an organization, and in this work advocated the idea that manufacturers of small articles in hickory buy the raw material from the users of the larger articles. If this had developed, as it was hoped it would, it would have meant that the users of hickory axles could buy flitches, work them up and dispose of their trimmings to others—that is, such of them as they were not able to use themselves.

The whole proposition seems illogical and a drift away from what would be the natural thing of the day in connection with hickory. There is a greater tendency than ever before to produce more dimension in the woods, to the end not only of saving freight on waste material, but also that the raw material may be more closely utilized. Many examples of this kind of conservation have been shown during the past few years, some of them recently in the columns of HARDWOOD RECORD. Moreover, it is perhaps safe to say that some manufacturers specializing in hickory products are today working along this line and accomplishing good results thereby. Meantime, no matter what the logic of the case or what arguments may be put up, pro and con, there seems no getting around the fact that the present drift among the sawmills merely cutting a small amount of hickory incidental to manufacturing a general line of hardwoods is toward marketing it in the form of planks and flitches rather than to reduce it to axles and smaller dimension stock.

Forest Products Exposition

Editor's Note

The following is an address delivered by Edward A. Hamar of Chassell, Mich., before the convention of the National Lumber Manufacturers' Association at Kansas City, Mo., June 3 and 4.

When your secretary extended an invitation to me to address you on a forest products exposition, I accepted, not with a feeling that I could in any manner do the subject justice, but with a firm conviction of the wisdom and advisability of holding that much discussed and long delayed exposition. During these years of business aggressiveness, the lumberman, engaged in one of the oldest and largest industries of the country, has remained singularly passive to this means of advertising, while the manufacturer of other lines of building material, ever alert, has adopted and used it with marked success. Now that our business opponent has so ably demonstrated what can be done, it remains for us only to fall in line.



EDWARD A. HAMAR, CHASSELL, MICH.

There is no other material that can be used in so many and varied ways as wood. It is capable of variety and individuality, and buildings constructed of it can be made attractive and artistic. Buildings of cement and brick are damp, cold and gloomy, and in order to compete with wood from an artistic standpoint, must be mellowed by time or artificially softened with running vines, or by some other means. Long before these other building materials were used to any great extent in this country, wood, being the most available and convertible, was a standard. The lumber industry in this country had its inception at the time the pioneer settler first landed upon the bleak and uninviting New England shores, where he immediately proceeded to cut timber with which to build his home. As the pioneer pressed on westward toward the Mississippi river in quest of new fields, he found himself surrounded by great forests to which there seemed no end. From a large part of that territory the timber has been removed and it is now covered with rolling acres of fertile farms. Our timber resources were vast and apparently inexhaustible. The government reports show that more than one-half of the original stand, in what is now the United States, is still standing. This large area is estimated at 550,000,000 acres. A large proportion of this area is now either under public domain or is held by timber holding corporations. The government and, to a certain extent, these corporations are doing all in their power to develop methods of judicious cutting and, by reforesting, to perpetuate our forests. With these conservative methods any possibility of a timber famine is very remote.

Our industry, including its numerous branches, ranks third in the United States, according to the census of 1910, being exceeded only by the meat packing and foundry and machine shop products industries. The industry has 695,000 wage earners, a larger number than any other industry, and with a value of its products estimated at more than $1,000,000,000, this amount being exceeded only by the meat and foundry industries, as aforestated. In a country with a population of 90,000,000, which is increasing at the rate of 4,000 per day, you have a consumption of housing material which is based on the same vital needs as the consumption of food products—a need which may be postponed for a short period more easily perhaps than the need of food products, but which merely accumulates in energy during such period.

Lumber has been and still is one of our cheapest commodities, the price being regulated largely by supply and demand, the price seldom covering the cost of the raw material and operating. So cheap has it been in the past that its cost has been looked upon as a very small item entering into the construction of a building. As the timber became more remote from the streams and railroads, and as more thinly forested areas were opened to the lumberman, the cost of the raw material naturally increased, and until the consumer pays what it costs to grow it, as well as what it costs to manufacture, the price will continue to advance. The lumberman's duty under these conditions is to educate the consumer to use lumber and to demonstrate to him that it is still the cheapest and most available building material. It is not the high cost of lumber alone that makes a building cost more now than ten or twenty years ago, but the high cost of other materials as well, including the high cost of labor. With the idea before him that lumber is dear, the consumer has very naturally turned to substitutes. The manufacturer of other building materials, quick to see the point gained, has pushed his advantage by judicious advertising through the press and by holding expositions. What has the manufacturer of lumber done to counteract this? Nothing but a small amount of advertising. What has he done to counteract the feeling that now exists against the using of wood? Practically nothing. There is only one way to change the view of the consumer a campaign of education; the best method the press and a forest products exposition. When I say a forest products exposition I do not mean merely an assembling of different kinds of lumber, etc., but one that will display all products of the forest in the raw material and in the finished, together with the machinery used in the manufacture. An exposition of this kind could be made very attractive and would be much discussed. The attendance would be large and the exposition self-supporting. I am reliably informed that an exposition company could be launched for $25,000 or $30,000. It would seem an easy matter to find 200 or 300 lumbermen sufficiently interested to furnish the capital. During the past year there have been held a number of expositions, among them the clay products and cement products. These expositions were made attractive and interesting and were well attended by people from all parts of the country. Is it at all strange that a man, after visiting one of these expositions and seeing the model of a house attractively built of cement or brick, should decide upon his return home to build his new house of one of these materials, even though he live in a community where lumber is manufactured and notwithstanding the fact that a wooden house is more attractive and artistic?

A forest products exposition, to be held under the jurisdiction of the National Lumber Manufacturers' Association, has already been endorsed by the Western Pine Manufacturers' Association, the Northern Hemlock and Hardwood Manufacturers' Association, the Southern Cypress Manufacturers' Association, the North Carolina Pine Association and the Yellow Pine Manufacturers' Association. The members of these associations are awakening to the necessity of doing something to counteract the inroads made on their products by the manufacturers of other building material, and have heartily endorsed the plan, and a number have signified their willingness to back up that endorsement with a stock subscription.

The present campaigns that are being carried on by the different

associations for their special products should be continued. This work, together with a forest products exposition, should so strengthen the market, by creating a steady use of lumber, that in the future we should not have the several usual lean years with one of fatness. Mineral building material, including the cement and clay products, until a few years ago, was so much more expensive than lumber that it was out of reach of ordinary builders, but owing to the improved methods of manufacture, coupled with the fact that lumber has advanced, it is becoming more commonly used. Now that the prices of all building materials have become somewhat equalized, it behooves the manufacturers of lumber to demonstrate the cheapness and superiority of wood as a building material.

When it comes to the matter of financing an organization for holding an exposition, there are a number of ways in which this may be done. For instance, it could be made an auxiliary of this association, or a distinct organization. Whichever method is adopted, the association will have to stand back of.

National Hardwood Convention

The National Hardwood Lumber Association met at its sixteenth annual convention at the Hotel Sherman, Chicago, on Thursday and Friday, June 5 and 6. In addition to the natural increase in attendance due to the increase of over one-hundred sixty in membership during the past year, the proposed changes in rules, in addition to the interesting program promised, resulted in a record attendance. The attendance set a new record, there being 743 present.

The notable events of the meeting were a striking address delivered by Harry A. Wheeler of Chicago, president of the Chamber of Commerce of the United States of America, and a discussion of the grading rules.

Murdock MacLeod, president of the Lumbermen's Association of Chicago, delivered an address of welcome, in which he fully impressed the visiting hardwood men with the sincerity of the welcome extended by the members of the trade in the Chicago market.

John M. Woods of East Cambridge, Mass., responded in a characteristically pleasing manner.

President Charles H. Barnaby of Greencastle, Ind., then delivered his annual address as follows:

President's Address

Gentlemen of the National Hardwood Lumber Association: In accordance with an established custom it is my privilege to submit a brief review of the accomplishments of the association during the past year.

One year ago you honored me by election to the office of president. Those of you who were present will perhaps recall that I made no promises other than to put forth my best efforts to carry out the policies of my worthy predecessor, which resulted in such substantial growth during his administration.

The National Hardwood Lumber Association was organized sixteen years ago to meet an urgent demand for inspection rules that would be universally recognized by buyers and sellers in all sections. During my brief talk one year ago when you so generously elected me chairman, I stated that we then had accomplished the objects for which we were organized. Possibly few doubted that fact then, but the great increase in membership as well as the very important gain in the quantity of lumber officially inspected during the past year prove beyond doubt the truth of the statement that in so far as hardwood inspection rules are concerned there is but one association today.

I trust you will pardon me if I dwell briefly on the past. Being a charter member of this association, having attended every convention but one, and having served as a director and member of the executive committee for six years, gives license perhaps to reminisce. This association was born in this city in 1897 and its first meeting was attended by less than thirty lumbermen. That there was great need of such an organization, no honest man questioned. Prior to that time every market had its own rules of inspection and both buyers and sellers interpreted such rules as they saw fit. In those days the question of securing fair treatment on the inspection and measurement was of equal importance with the financial standing of the customer. Not so today, because after our investigation of credit has been made and results show a solvent condition, the old problem of inspection and measurement is fully and finally solved by stipulating the official rules of the National Hardwood Lumber Association. As a direct result of the work of this organization the hardwood lumber industry has been placed on a high plane and today ranks second to none in the entire commercial field.

While I do not propose to weary you with statistics, I cannot refrain from calling your attention to the rapid growth of our inspection department. In 1905 we had four salaried inspectors, whose earnings in inspection fees were not sufficient to cover the salary and expense the association was put to in maintaining them. Today we have thirty-five salaried inspectors, who for the fiscal year ending May 1, 1913, together with the fee inspectors, measured and inspected a total of nearly 180,000,000 feet, with practically no expense to the association. This is an increase of 47,000,000 feet over 1912, or about thirty per cent. During the year re-inspections have been called on 1,594,695 feet, which is less than one per cent of the total amount. The result of these re-inspections shows a difference of four per cent, or more in money value on only 261,469 feet, resulting in claims paid by the association of $345.30. I submit these figures as positive evidence that great progress has been made toward securing a more uniform application of the rules by the inspection force. It is my belief that much credit is due our chief inspector for this improved showing, and I do not believe it would be possible to engage a more competent corps of inspectors than our present force.

The increase in membership is also gratifying. One hundred and sixty new members have been admitted during the year, bringing the total to 859. I wish to call your attention to the fact that gains have been made in territory new to the National Hardwood Lumber Association. I refer to our neighbors in Canada, and if you will consult the present list you will find we now have twenty-one members in Canada, as against three one year ago. The inspector stationed in Toronto has made a creditable showing and I believe even greater progress will be shown in that territory during the coming year.

There is no longer opposition to the rules and official inspection of the National association in Greater New York. We now enjoy the support of forty-six firms in that market, so that this year marks an increase of nearly one hundred per cent in our numerical strength in that important center.

In a large majority of the distributing markets and producing centers our support today is practically unanimous, and this fact is surely corroborative of the claim that there exists today but one recognized set of inspection rules for hardwood.

In the revised by-laws adopted at our last annual meeting, article nine, section one, reads as follows:

"The inspection rules of this association can be changed only at an annual meeting by two-thirds majority vote of the members voting thereon."

Section two:

"No change in the inspection rules shall be considered or voted upon by the membership unless such proposed change shall have been submitted in writing to the chairman of the inspection rules committee not less than ninety days prior to said meeting. The inspection rules committee shall submit to the membership through the secretary's office its recommendations regarding such changes not less than thirty days prior to the annual meeting."

Article ten:

"These by-laws may be altered or amended by the usual two-thirds vote of the members present at any annual convention, except article nine, which may only be amended, altered or changed by giving notice of the proposed changes to the secretary-treasurer thirty days prior to the annual meeting, such notice to be signed by not less than ten members. The proposed changes to be submitted to the convention and voted on in the regular way."

In conformity with article nine, section two, the inspection rules committee, in its annual report, will submit at this meeting to the membership its recommendations for changes in inspection rules as have been proposed by members of the association. In further conformity with article nine, section two, these recommendations have been printed and were mailed to each member from the secretary's office on Apr. 5, 1913. As to the advisability of the proposed changes being adopted, your chairman offers no comment. It is much more vital to every member that the association be maintained in its present condition of efficient usefulness than can be the particular wording of any inspection rule. Our corps of inspectors, however, is amply able to carry on inspection work for the membership at large, whether changes are made or not.

I have received, during the past sixty days, many letters from all branches of the trade in every section of the country, some favoring slight changes and others opposing any change. I have invariably replied that, inasmuch as it takes a two-thirds vote to change the rules of inspection, I was perfectly satisfied that no change detrimental to the association or trade at large would be made. The only criticism that has reached me during the year regarding our official inspection is to the effect that some of the inspectors are at times rather technical in the application of the rules. This criticism has by no means been general, but, in fact, has



CHARLES H. BARNABY, GREENCASTLE, IND., RE-ELECTED PRESIDENT



FRANK F. FISH, CHICAGO, SECRETARY



ORSON E. YEAGER, BUFFALO, N. Y., FIRST VICE PRESIDENT

been confined to a very small percentage of members regularly employing the service. In the recommendations submitted to you by the inspection rules committee they have advised some modifications that will, in their opinion, remove this criticism. You, no doubt, have given due consideration to the recommendations and I have no fear that other than wise counsel will prevail. This I will say: there is no member of the association who would not be worse off with every rule in the book written to suit his taste exactly and with no association to enforce such rules than he is today with some rules which may not suit his fancy, but with many other rules which are to his interest, all of which are rendered effective by the prestige which the association possesses at this time.

I can not emphasize too strongly the quality of this membership and it is a source of much pride to me that the best firms in all branches of the trade are now on the membership roll. I am proud to be on this list and consider it a great honor indeed to have served as your president.

It is with pleasure that I call your attention to the reporting system which has been installed during this year. In our first call for reports from the consuming trade we requested a financial report, as well as statement of amount and kind of lumber consumed annually. Over fifty per cent responded to our first letter and at the present time we have over five hundred reports on file, which can be obtained on request. This department has great possibilities and those who have used it are enthusiastic in their praise of its value. It has already passed the experimental stage and we are satisfied will prove of great value to our members. Up to the present time no charge has been made to the members for these reports, but to perfect the department and render it more efficient means an additional expense and possibly a slight charge for these reports will be found necessary.

We are closing the year in sound condition financially, as the secretary-treasurer's report will show. It has been suggested that an increase in annual dues or inspection fees should be considered at this time, to the end that the association be enabled to establish a reserve fund and be placed on a strong financial basis. The field for new members is rapidly narrowing and less revenue will accordingly be forthcoming from initiation fees. As mentioned above, 160 new members have been enrolled this year, which has brought us a revenue of $4,000, but we cannot expect to continuously derive this amount from that source, and I recommend that the subject of an increase in annual dues be considered at this meeting. No association of any kind does so much for its membership on such small annual dues.

Very few of the officers and directors have charged their expenses in attending board meetings. We have now reached a point where we should assume these expenses. When the association was struggling for a foothold and funds were scarce these men gave their time and expenses freely and are still doing so.

You will later hear the reports of the inspection rules committee, special committee on overweight claims, transportation committee, forestry committee and waterways committee. The members of these several committees have given much time and thought to their subjects, always bearing the good of the association in mind.

The year's work as your chairman has been most pleasant. I wish to take this opportunity to thank the members, officers, directors and members of committees for their kind and loyal support and to assure them of my grateful appreciation. I also desire to thank the lumber press for its assistance and support of the association.

We must not overlook the fact that the success of our association is largely due to the wise and intelligent management of Secretary Fish and his able assistants, the chief inspector and his efficient deputies.

The address of the secretary-treasurer, Frank F. Fish, was then read as follows:

Report of Secretary-Treasurer

The National Hardwood Lumber Association, during the fiscal year which closes with this convention has made greater progress in every department than in any previous year in its history. There is no market or section in the United States or Canada in which its rules do not govern, nor is there any section in which buyers are unwilling to recognize its official inspection. The figures which are presented in this, my eighth annual report, show in detail the exact amount of lumber inspected in the various markets, the increase in membership, and the resources as indicated by our books at this time.

In drafting this report and statement it is impossible to list the asset of greatest value and importance, which consists of the confidence and good will of practically every important buyer of hardwoods throughout the United States and Canada, who has become convinced, through many tests, that the present rules and their official application, through the inspection bureau, furnish protection and provide fairly for his interests. A large number, probably a majority of the new members who have joined our ranks during the year, have done so in recognition of the valuable services rendered to all branches of the hardwood industry, but there are a number who have become identified with this association because they found it difficult in some cases, and absolutely impossible in many instances, to obtain recognition from representative buyers unless they placed themselves in a position to furnish the bonded certificate in case of a dispute or difference after the arrival of their stocks. It is therefore evident that this association has established a service that has become an absolute necessity in many instances to the successful conduct of business.

The figures presented in this report show that the inspection department has officially inspected a larger amount of lumber during the past twelve months than in any similar period in the record of the department. While this increase in volume is gratifying, far greater satisfaction is offered in the indisputable evidence to follow, of greater efficiency. This is evidenced by the fact that fewer re-inspections and complaints have been registered on a volume of 179,000,000 feet than were received during years when the inspection bureau totals were less than 80,000,000. No one can successfully contradict the statement that a greater degree of uniformity exists today in the application of National rules by the force of licensed inspectors than ever before.

It is my belief that the force of inspectors now in the employ of this association is the most competent and reliable that can be secured. Our confidence in the judgment and ability of the force is best illustrated by a brief statement of a general offer that is being made whenever serious complaint or criticism is offered. Occasionally a letter is received charging that the inspector representing the association in some market has discriminated unfairly against the shipper and in a few instances the charge has been made that such inspector is influenced to the detriment of the shipper by local buyers. In all cases we reply to the writers of these letters urging that they meet the chief inspector of the association at the point where the lumber is located and go over it with him, and the association guarantees to pay railroad fare and all other expense of the shipper if, after the investigation, he is not convinced that the original inspector's work was absolutely fair to his interests and that he received the protection to which he was entitled under the National rules of inspection. During the year this proposition has been accepted by a number of firms and without exception the charges of unfairness or incompetency have been withdrawn and the association files now contain numerous letters testifying that the charges brought were without foundation and that the error was that of some inspector other than the National Hardwood Lumber Association's deputy.

The figures in detail of the inspection department for the year ending



J. V. STIMSON, HUNTINGBURG, IND., SECOND VICE PRESIDENT



E. V. BABCOCK, PITTSBURGH, PA., THIRD VICE-PRESIDENT



J. M. PRITCHARD, MEMPHIS, TENN., CHAIRMAN INSPECTION COMMITTEE

May 1, 1913, showing the quantity inspected in each market, with the amount earned and exact expense of maintenance, follows:

	Feet inspected.	Earnings.	Expenses.
St. Louis, Mo.	10,320,936	$5,372.18	$5,147.41
Chicago, Ill.	9,327,170	5,596 03	5,532.66
Memphis, Tenn.	6,966,171	3,967.67	3,618.50
New Orleans, La.	6,853,528	3,875.38	3,447 60
Cincinnati, Ohio	5,773,130	3,708.82	4 976 64
Philadelphia, Pa.	5,314,522	2,988 65	2,555.08
Boston, Mass.	4,428,769	2,319.95	1,908 93
Detroit, Mich.	4,325,270	2,487.66	2,178.87
Minneapolis, Minn.	4,108,124	2,208.35	2,353.56
New York City, N. Y.	3,984,254	2,530.85	2,225 32
Buffalo, N. Y.	3,410,680	1,901.18	2,101.38
Huntington, W. Va.	3,529,204	1,834.20	1,952.17
Chattanooga, Tenn.	3,407,988	1,799.29	1,360.62
Louisville, Ky.	3,312,817	1,773.35	1,957.30
Cairo, Ill.	3,303,710	1,902.82	1,500.23
Milwaukee, Wis.	3,127,700	1,820.46	1,828.50
Nashville, Tenn.	2,336,193	1,241.30	1,653.60
Baltimore, Md.	2,268,631	1,354.98	1,304.92
Toronto, Ontario	2,066,855	1,117.59	1,427.08
Pittsburgh, Pa.	1,885,309	1,182.82	1,699.70
Bristol, Tenn.	1,875,162	967.07	1,200 00
Arkansas	1,232,461	683.35	625.75
Indiana	819,181	717.59	1,060.20
Michigan Mills	352,950	176.83	159.25
Chief Inspector	1,520,975	1,958.33	6,705.75
Michigan and Wisconsin Mills (fee)	74,589,268	3,729.33	.....
Grand Rapids, Mich (fee)	8,773,939	438.69	.....
Mobile, Ala (fee)	718,494	35.93	.....

As shown above, the work of the salaried inspectors shows a total of 95,851,690 feet, which is a gain for them of 17,882,171 feet over last year, while the work of the fee inspectors at mill points totals 84,081,701 feet, a gain of 29,206,964 feet over the year previous. The total net gain over 1912 is 47,089,135 feet, and a comparison of this amount with that of the year which closed May 1, 1911, shows an increase of 67,898,215 feet.

In April, 1912, an inspector was stationed at Huntington, W. Va., and the demand for the service necessitated placing a second inspector in that district, which was done in January of this year. In September last a majority of the leading hardwood manufacturers and wholesale dealers of Toronto joined the association, and a salaried inspector was located there. We have recently placed Sault Ste. Marie on the list and increasing demand has resulted in the appointment of assistant inspectors in Philadelphia and New York City.

The figures covering official reinspection indicate that substantial and permanent progress have been made toward getting a more uniform application of the rules by the inspectors and that national inspection is finally and firmly established in all markets. There is no doubt that the recent disastrous floods in many sections materially reduced the volume of inspection work, but notwithstanding these disasters, our inspection department shows a net increase of 25 per cent over last year.

Additional evidence of our progress is afforded by the increase in the membership. Since the meeting held here in Chicago just one year ago (June 6 and 7, 1912) 170 new applications for membership have been received, of which ten were rejected either on account of being undesirable or ineligible. Failures and withdrawals from business number 81; 10 have been dropped on account of being delinquent in the payment of dues, and 10 have resigned. The total number of new members admitted during the year is 160, being a net gain for the year of 59 members, bringing the present membership to 859. When the fact is considered that we started the year with 800, it is believed that this gain will compare favorably with that of all other lumber and trade organizations. A brief analysis of this membership by states is as follows:

Michigan	92	Arkansas	34
Pennsylvania	89	Indiana	32
Illinois	81	West Virginia	31
New York	79	Kentucky	28
Tennessee	68	Massachusetts	25
Wisconsin	61	Canada	21
Ohio	46	Minnesota	18
Louisiana	42	Virginia	15
Missouri	38		

Above we account for 800. The remaining 59 are located as follows: Mississippi, 12; Maryland, 9; Alabama, 7; North Carolina, 7; Texas, 6; Georgia, 4; New Jersey, 3; Connecticut, 2; Florida, 2; Rhode Island, 2; Iowa, 2; South Carolina, 2; California, 1.

During the year five meetings of the executive committee and board of managers have been held, as follows:

Board of Directors, June 7, 1912.
Executive Committee, October 24, 1912.
Board of Directors, January 15, 1913.
Executive Committee, May 6, 1913.
Board of Directors, June 4, 1913.

All of these meetings excepting one were held at the executive offices in Chicago, the exception being the meeting of May 6, 1913, which was held in Louisville, Ky., on which occasion the committee was the guest of the Louisville Hardwood Club. All the meetings have been well attended. Every suggestion and complaint has been carefully reviewed and if there is a just claim outstanding at this time it is due to the fact that it has not been presented in proper form to the association through the office of the secretary.

In previous annual reports the attention of members has been called to the fact that failure to inform themselves was responsible for a majority of the complaints registered and this same statement applies to the year just closing. In your own interests as well as those of the association, I wish to impress upon you the importance of a thorough understanding of the rules which govern the inspection department. These rules are printed on pages 6, 7 and 8 of the official book of inspection rules.

My report submitted last year contained the recommendation that the association add a department for securing information from consumers and acting under the orders of the committee on officer's reports, this work was started in November, 1912. Blank forms providing space for statement of resources and liabilities, and also for listing their annual requirements in hardwood lumber, were sent out to a number of consumers in all sections of the United States and Canada. Nearly 50 per cent of the consumers receiving these blanks responded almost by return mail and by following up those who had not been heard from, we were successful in getting the desired information from a majority of them. Our experience to date proves conclusively that the co-operation of fully 75 per cent of the important buyers of hardwoods in car lots can be secured. In order to acquaint the membership with the plan, the first lot of reports (about 225) showing annual hardwood requirements, were printed in pamphlet form and sent out under the title of "Consumers' Register" in March last. Tickets of inquiry have been sent every member and as now operated we undertake to secure a signed financial statement and register of requirements on any consumer in the United States or Canada members inquire upon. Although these inquiry tickets did not reach the membership until about April 1, our records show that we have answered over five hundred inquiries since that date, and it affords me pleasure to be able to report numerous letters commending the reports furnished. Some objection was entered against the plan of publishing and sending out this information in the form of a pamphlet, and your Secretary suggests that the plan be adopted of a printed bulletin each month to include the names and addresses of consumers who have filed statements during the previous month, so that members finding names of interest can secure the complete report on application at the

general office. This monthly bulletin could also include the information now covered by the monthly letter to members and show the names of firms applying for membership, and also those of members dropped for any cause, thus furnishing a list of members revised monthly. Along the same lines, the bulletin, as the official organ of the association, would report all changes in the list of inspectors and each issue carry an up-to-date list of names and addresses of the licensed inspectors. I desire to recommend to the membership a trial of the plan to issue a monthly bulletin to include the information above outlined.

The finances of the association during the past year show some improvement and sufficient funds have been available to enable the association to promptly meet bills and obligations of every nature. On June 1 there was no indebtedness of any nature. The following is a detailed statement of receipts and disbursements, the correctness of which is certified to in the attached report of Marwick, Mitchell, Peat & Co., public accountants and auditors:

RECEIPTS

Balance reported at convention, June 6, 1912		$ 1,678 24
From membership dues	$32,951 96	
From inspection fees	59,684 21	
From inspection rules	432 94	
		93,069 11
		$94,747 35

DISBURSEMENTS

Salaries and expenses secretary-treasurer, assistant secretary, chief inspector, inspectors and office help	$75,931 43	
Postage and printing	4,952 00	
Convention, executive committee, standing committees and miscellaneous expense	3,129 41	
General office expenses, telephone, telegraph, light, exchange, supplies, etc.	1,945 25	
Re-inspection settlements and claims	1,265 40	
Rent	2,880 00	
Refunds	98 11	
Office furniture	743 15	
		90,944 75
Leaving a balance on deposit at the Fort Dearborn National Bank, June 2, 1913, of	$ 2,015 42	
In the Hibernian Bank, June 2, 1913, of	1,000 00	
And cash on hand, June 2, 1913	747 18	
Total in general fund		$ 3,762 60
In addition the books show outstanding accounts for inspection fees earned, $6,069 62; for membership dues payable, $4,755, and advances to employes, $725, a total of		11,549 62
Bringing resources in cash and good outstanding accounts to		$15,312 22

CASH DEPOSIT FUND.

Balance on hand as reported at convention on June 6, 1912, $650.00.

Today this membership is an organized force of 859 firms. To the active and loyal interest of the officers and members the present condition of the association is due, and as secretary I desire to acknowledge the support given my office and to express my appreciation.

The standing of any association depends upon the active interest of its membership. Your help, as individuals, to maintain the present standard is necessary, and a continuation of your co-operation and support is earnestly requested.

The report of the forestry committee was read by John M. Woods of East Cambridge, Mass., as follows:

Report of Forestry Committee

"Whom art thou like in thy greatness? Behold, the Assyrian was a cedar in Lebanon with fair branches and with a shadowing shroud, and of high stature, and his top was among the thick boughs. The waters made him great, the deep set him up on high with her rivers running round about his plants, and sent out her little rivers unto all the trees of the field. Therefore his height was exalted above all the trees of the field, and his boughs were multiplied, and his branches became long because of the multitude of waters, when he shot forth. All the fowls of heaven made their nests in his boughs, and under his branches did all the beasts of the field bring forth their young, and under his shadow dwelt all great nations.

"Thus was he fair in his greatness, in the length of his branches, for his root was by the great waters. The cedars in the garden of God could not hide him; the fir trees were not like his boughs, and the chestnut trees were not like his branches; nor any tree in the garden of God was like unto him in beauty. I have made him fair by the multitude of his branches, so that all the trees of Eden that were in the Garden of God envied him."

Can human mind express in language the beauty, sublimity and value of the forests better than these words of the old Hebrew prophet, written more than twenty-five centuries ago? Verily, "the trees of the field is man's life" and "the leaves of these are for the healing of nations." "I will plant in the wilderness the cedar, the shittah tree, and the myrtle and the oil tree. I will set in the desert the fir tree, and the pine, and the box tree together, that they may see and know and consider and understand together that the hand of the Lord hath done this, and the Holy One of Israel hath created it. * * * Instead of the thorn shall come up the fir tree, and instead of the briar shall come up the myrtle tree, and it shall be to the Lord for a name for an everlasting sign that shall not be cut off. * * * The glory of Lebanon shall come upon thee, the fir tree, the pine tree and the box together, to beautify the place of my sanctuary, and I will make the place of my feet glorious."

Your committee fully realizes the Herculean task of properly presenting this subject for your consideration. With all that has been said and written and all our experience we have not and cannot master even the alphabet of forestry, its tremendous value to the human race, its necessity, for the purity of the air, and protection of the water supply, not only for domestic uses, navigation and motive power, but for a home for the fish to supply food for mankind. The forest is the natural home for the bird and animal. Figures are feeble to express the financial value to the nation, capital employed, wages paid, value of output, the necessities and luxuries of home, business, transportation, reading and communication, hundreds of thousands of our people depending upon the forests to earn their living. Is it not worth our while to do all we can, by precept and example, to wisely use, carefully conserve this invaluable heritage so that it may serve the coming generations as it has the past and present, leaving out every noble sentiment, all the pleasure humanity enjoys, all its beneficent influences in shaping and moulding character? Financial considerations alone are sufficient to justify legislature in state and nation in making investigations, voting appropriations, formulating plans for the care and management of the national forests and in every way possible encouraging, assisting and educating the whole people to a judicious use of what we now have, and by afforestation lay the foundation for a permanent forest supply. So far the history of the forests is the same as the history of the Indian, buffalo, and deer, constantly receding before civilization, without prompt and intelligent action on the part of the nation, state and individuals. The prophecy put into the mouth of the Indian by the poet Bryant will be fulfilled. "But I behold a fearful sign to which the white man's eyes are blind.

"Before these fields were shorn and tilled
Full to the brim our rivers flowed
The melody of waters filled the woods,
These pleasant sounds are heard no more
The streams are silent as the sun
The rivers by the blackened shores
With lessening currents run.
The realms our tribes were crushed to get
May be a barren desert yet."

No criticism can be made against this association or its members of lack of zeal or interest in forestry. By patient continuance in well doing we shall reap, if we faint not. Your chairman prepared and had introduced in the Massachusetts legislature a resolve protesting against turning over the national forests to the states in which they are located. This resolve passed unanimously both branches of the legislature, was signed by the governor and a copy sent to the senators and representatives in Congress from our state, eighteen in all. Also, as chairman of this committee, protested for this association against any curtailment of the appropriation for the care and management of the national forests. Legislation in state and nation has been closely watched in all matters relating to forestry; Chief Forester Grave's advice and counsel have been asked and all that your committee has done or tried to do has met his hearty approval. As every member of the association is aware, in the Underwood Tariff Bill lumber in about all its forms is put on the free list. What effect this will have on the forest and its products there are probably widely divergent views among our membership. Your committee does not feel it wise to make any recommendations, feeling that each member will give his views pro or con to the committee on ways and means of Congress, or to his representative in Senate and House. While not expressing an opinion as a committee, your chairman's individual opinion is expressed in the shortest, and what he believes the best speech ever made on the tariff by the great president, Abraham Lincoln. When asked what he thought about the tariff, he said, "I don't pretend to know much about the tariff, but I think this: If we buy our goods abroad, they get the money and we get the goods; if we make the goods at home we have got both the goods and the money." Nearly everything in this world that is alive goes in pairs: the same applies to business and economic conditions. Low prices and low wages generally go together, and high prices and high wages likewise. For one humble lumberman I feel that there is competition enough amongst ourselves to warrant the belief that not more than an honest, legitimate profit can be made, or the great public wronged or injured, and further that it is not necessary to send an elaborate engraved invitation to all the world to come in and help themselves to our markets without money and without price, and that the divine injunction that he who neglects to provide for his own has denied the faith and is more than an infidel, applies with equal force to nations as to individuals. Looking into the faces of this body of men, of long experience, high character and demonstrated business ability, I cannot but feel that our great president, for whom I have greatest respect believing him an honest, sincere, able man, but hardly competent by experience and training to instruct you gentlemen in the art of transforming the standing tree in the forests into merchantable lumber; some of us I am sure would, as he says, like to sharpen our wits so that the many, sometimes insurmountable physical obstacles might be removed. But no Princeton university, correspondence, or other school will teach one to run a sawmill under water, or teach alligators to haul saw logs in a flooded district. Books do not teach every

thing one has to know to successfully carry on the lumber business. Most of us have been brought up in the business and kept abreast of the age, and this association is an illustration of modern thought, putting the combined knowledge and experience in concrete form for the benefit of all. Could forestry, business and the tariff be completely divorced from partisan politics and put into the hands of men like those at the head of this and other great business organizations, it would result in stable business, increased efficiency and greatly lessened taxation. As individuals we should be willing to accept public office. Let the men who represent you in the law-making bodies know your views; they are human and susceptible of public opinion. If they are honest they want all the facts. We need first of all high-minded men of demonstrated business ability to legislate on business matter. "Righteousness exalteth a nation, but sin is a reproach to any people." Labor and capital, business, banking, manufacturing, agriculture, forestry are all interlocked and neither can be hurt without all the others are, directly or indirectly. The same rule applies to all sections: "If one member suffers all the members suffer with it. Friday, May 30, a united country reposed from its labors and stood with uncovered head, with song, prayer and gifted, inspired speech paid a loving tribute to the men who saved the nation in the dark days of 1861 to '65. Above every soldier's grave, Nature's choicest flowers, and the emblem of the nation. I believe we can all say:

Your flag and my flag,
  There it flies today;
Over your land and my land,
  Half a world away.

Blood red, rose red,
  Its stripes forever gleam;
Pure white, soul white,
  Our good forefathers' dream.

Sky blue, true blue,
  The stars that shine aright—
A glorious guidon of the day,
  A shelter through the night.

Your flag and my flag,
  And oh, how much it holds—
Your land and my land
Safe within its folds.

Your heart and my heart
  Beats quicker at the sight:
Sun kissed and wind tossed,
  The red, the blue, the white.

The one flag, the great flag,
  The Flag for me and you;
Glorified, all else beside,
  The red, the white, the blue.

As long as political lawyers and unprincipled labor agitators make our laws and control our financial and business interests, just so long will agitation, instability, loss, high taxation, and reckless, needless expenditures continue. The business interests of this nation ought to rise up in all their might and say to President Wilson, Congress and state legislatures that class legislation like the rider tacked onto the sundry civil service bill relating to labor unions and farmer's organizations shall stop now and forever. Both have legitimate fields, and when properly conducted are capable of doing much good, but both should be compelled to incorporate under the law, and if they violate it, be amenable to it. It means trouble and anarchy when organized bodies can do what the individual, firm or corporation cannot lawfully do.

In conclusion I ask each one of you to take an active interest in political affairs; keep a vigilant watch on all state and national legislation.

Emil Guenther of Philadelphia reported as follows for the transportation committee:

Report of Transportation Committee

The past year has seen considerable readjustment of traffic problems which have been pending for some time. The Interstate Commerce Commission has held numerous hearings and many new important rulings and decisions have been made. These matters, however, have been reported in detail by the various lumber journals, and the committee believes that the members are well informed. There are several rulings, however, to which the committee desires to direct the attention of the members, and cites the following:

RULING NO. 379: INTEREST UPON OVERCHARGE CLAIMS

Upon inquiry, held, that on all unsettled claims for overcharges, carriers must pay interest from the time the charges were improperly collected. From this it will be seen that the shippers at last have an effective right which, if exercised, will do much to correct the delay in adjusting claims. This one matter alone has been the cause of numerous bills being introduced to Congress to facilitate prompt handling of claims by railroads. It is the opinion of the committee that the railroads are now giving more prompt and better attention to claims for overcharge, etc., due, no doubt, to the pressure which has been brought to bear, and the criticism of their methods.

There is another matter which seems to be commonly misunderstood with regard to the rights of the consignee accepting delivery of goods from points other than noted on routing instructions. In several instances, it appears that shipments, made with instructions for delivery on the tracks of one carrier, were misrouted, and arrived at destination on tracks of another carrier; however, they could have been switched to the proper delivery tracks without unreasonable delay at the expense of the carrier at fault. Instead of instructing the railroad to do this, the consignee drayed the shipment to his plant expecting to collect charges for drayage from the railroad on account of their error in making delivery on the wrong track. The railroad refused to consider the charges, and the matter was taken before the Interstate Commerce Commission, which ruled that reparation for the cost of the drayage could not be allowed, inasmuch as the consignee had the right to compel the railroad to make delivery on tracks as specified by routing instructions, but, failing to exercise this right, waived all claims for additional expenses incurred. This is according to rulings No. 234, 283 and 286—"D," overruling No. 25.

In regard to the question of rates, this matter is the source of growing agitation and discussion. There is no doubt that the railroads will soon make a concentrated effort towards a general advance, and whether or not the business of the country can stand advances, is a question that must sooner or later be definitely decided. It is a well known fact that the volume of traffic has greatly exceeded the growth of the facilities of the railroads and extensive additions and improvements will have to be made promptly in order to give any effective relief. The railroads claim that the present rates do not give sufficient returns to enable them to make such improvements, due to the fact that expenses have gone up rapidly during the last few years. Increased wages, legislation, both federal and state, has had an important influence upon expenses, and the railroads claim that a general increase of rates is imperative. The recent bulletin, issued by the Bureau of Railway Economics at Washington, D. C., shows by statistics compiled, that the capital value of railway properties is increasing less than half as fast as the capital values of either the agricultural or manufacturing industries, and also that the percentage of the net return on capital in manufactures is over twice as high as on railways. The shippers will have to be well prepared to present their side of the case strongly, in order that a standard of fairness for all concerned may be maintained. In regard to this matter, the committee desires to adhere to its former policy, that nothing is to be gained by antagonizing the railroads, and that it will be best for all interests to discuss the matter thoroughly, and test it out fairly in a friendly manner, rather than assume an aggressive, belligerent attitude. That the majority of carriers have made an effort to gain the good will and favor of the public is evident, and to accomplish this they have devised several plans which have really done much towards the improvement of general conditions. The railroads have recently endeavored to show that they are at the service of the public, and in some instances officials of authority have accompanied special trains in order that any grievances in the community visited could be immediately brought to the attention of the proper officials and adjusted at once. The committee feels that this attitude expresses a willingness to cooperate with the public, and a desire for a reasonable hearing to acquaint the public with their needs which should be reciprocated by the shippers. It is to be remembered, however, that the shippers have rights which must not be waived or overlooked, and that they are prepared to protect their interests.

The railroads have already attempted to raise rates in several instances, but protests were filed with the Interstate Commerce Commission, and suspension of the tariffs providing such advances were ordered until full investigation could be made. In connection with this matter a communication was received from one of our members in regard to the proposed advance of rates in the southern territory, which the committee referred to the Interstate Commerce Commission, and believe that the matter will be settled shortly.

In conclusion, the committee is very much gratified with the support and manner in which the members have received the various recommendations that have been made, especially so with regard to placing complaints directly before the Interstate Commerce Commission, which, no doubt, is the cause for a considerable decrease in the volume of correspondence formerly received relative to these matters. The free and more extensive use of the privilege granted by the Act To Regulate Commerce has probably been the greatest factor in eliminating friction and restoring harmony, and the efforts of the committee to keep the members informed have been well rewarded and considerable benefit derived.

It has always been the aim of the committee to maintain a conservative and friendly attitude with the railroads and avoid the aggressive and critical arguments which were rife so short a period as four years ago. Nothing of lasting benefit has ever been accomplished in the heat of angry discussion, and the change to more friendly relations which have lately been evidenced points to a new era of understanding which argues well for the accomplishment of more permanent good to all parties concerned than ever before.

Following Mr. Guenther's report, the meeting adjourned until 2:30.

THURSDAY AFTERNOON SESSION

President Barnaby opened the afternoon session by calling upon Secretary Fish to read certain communications which had been received. Among these was a wire from Fred A. Diggins of Cadillac, Mich., ex-president of the association. The esteem in which Mr. Diggins is held by everyone in connection with the hardwood trade was thoroughly attested by the welcome response the communication received.

The committee on overweight claims, of which James E. Stark is chairman, reported substantial progress in establishing a basis for the weighing of carload shipments, which it is believed will be entirely satisfactory both to railroads and shippers. Attention was called to the movement to this end originating at the Memphis meeting in 1911, and the action taken by the Grand Rapids Lumbermen's Association in filing a petition with the Interstate Commerce Commission for a general investigation of the weighing of carload shipments.

Investigation showed that the weighing of cars had been grossly and irregularly handled, the scales were not inspected regularly, and in many cases the railroads had no record or knowledge of the accuracy of scales. It also developed that cars were weighed in motion without being uncoupled.

The committee is firm in the belief that the evidence presented in behalf of shippers will result in a decision that will be just to the shipper. Attention was called to a final conference on this subject which was held at Washington on April 26. The railroads were largely represented, as well as large shipping interests.

Specific recommendations for accurate weighing of cars were recited.

Harry A. Wheeler, president of the Chamber of Commerce of the United States of America, talked on the object of that association, emphasizing the necessity for the work which his organization is carrying on. His talk made a serious impression on the minds of all those in attendance, and was listened to with the greatest concentration. The appreciation of the address was manifested by the applause with which it was received. This address will appear in full in a subsequent issue of HARDWOOD RECORD.

Edward T. Miller then reported as follows for the waterways committee:

Report of Waterways Committee

Your committee on waterways begs to report that the question of waterways resolves itself into two distinct yet closely related phases, the maintenance and promotion of navigation and the protection of lands from overflow. The past year has shown no diminution of energy or determination on the part of the friends and advocates of the development and improvement of our national waterways, several enthusiastic meetings having been held, notably in Little Rock, Memphis and Washington, but in spite of the fact that enough money has been spent on waterway convention in the last few years to equip and operate a first class line of steamboats and enough on levee congresses to construct a very respectable line of defence there yet seems to have been very little accomplished for the good or the ultimate settlement of a policy for navigation or protection.

For various reasons the last decade has witnessed a decided decline in the business of our inland waterways, perhaps the most important reason being the competition of railroads, and it is doubtful if this will ever be materially overcome so far as freights are concerned. The railroads deliver freights either at the consignee's warehouse or at an accessible point for drayage, while from the very nature of things the vessels must deliver at unhandy points, sometimes almost inaccessible, and it has been demonstrated that most people would rather pay the higher rates to the railroads to secure this better delivery.

Most of us can remember when there were through lines of steamboats on the Ohio and Mississippi rivers between St. Louis, Cincinnati and New Orleans; but today the voyage involves a change of boats at Memphis and Vicksburgh, a through packet being a rarity as against former regular service. All the old lower river lines have gone out of business and have had no successors; the only exception being the Lee Line of Memphis, which has been growing and expanding steadily for the last ten years. The apparent success of this line furnishes much food for thought with reference to the decadence of other lines.

At the time of our last meeting in this city the lower Mississippi was in the grasp of the most disastrous flood in its history, the crest having passed out of the Ohio; and now we are just able to begin to figure up the damage of what was the most serious flood in the valley of the Ohio and what threatened to be a repetition of the disaster of 1912 in the lower Mississippi valley, the never-to-be-forgotten flood of 1913. Owing to breaches in the levees in 1912, 1,700,000 acres were flooded in the state of Louisiana alone, and a property damage conservatively estimated at $25,000,000.00 was inflicted. In Arkansas and Mississippi the damage and loss amounted to fully as much more, and it is doubtful if $100,000,000.00 is too high an estimate to place on the total loss of this great flood in the states of Ohio, Indiana, Illinois, Kentucky, Missouri, Tennessee, Arkansas, Mississippi and Louisiana. In fact, it is impossible to successfully estimate the injury of such floods, as it is both cumulative and continuous. One man's loss is not confined to the value of the goods destroyed at one time but is augmented by the fact that it may be several years before he again reaches his former standard of production. When we consider that the flooded area in Louisiana alone was 30 per cent greater than the area of the state of Delaware it is possible to form a more concrete idea of the territory covered, and of this at least one-third was in cultivation, much of it in a very high state of cultivation.

With regard to the moneys invested in the protection of lands from overflow, Louisiana alone has since 1882 expended of state and board funds, together with national appropriations over $50,000,000.00, to which may be safely added $25,000,000.00 more expended by private individuals and corporations. This state alone has 1,650 miles of levees. As to the value of the investment, it is only necessary to state that in 1882 the total assessed valuation of Louisiana was $197,417,000.00, while in 1912, the latter assessment being made after the recession of the flood, it was $550,517,000.00. The other states of the lower Mississippi valley will show corresponding figures.

The drainage and reclamation of vast bodies of land in the entire Mississippi basin, which includes nearly one-half the area of the United States, has materially increased the total volume of the stream annually and it does turn into the river in a much shorter time than formerly a greater quantity of water; and to this fact alone is owing the ever increasing height of the floods, the natural conformation of the land making this one river the only outlet for this vast territory. Should it ever occur that such floods as this year came out of the Ohio should at the same time come from the Missouri, Arkansas, and Red, as well as from the upper Mississippi, the terrible destruction is beyond thought limit.

Your committee submits that there is no other class of producers that is more concerned with the support and improvement of navigation than are the lumbermen, by reason of the nature of their product adapting it to water transportation;

That by reason of the interstate nature of most of the large streams their satisfactory and uniform care and improvement must rest with the national government;

That in order to make navigable streams of value there must be a successfully cultivated territory immediately tributary to these streams and that this cultivation may be made both possible and remunerative it is necessary that this territory be as fully protected from disastrous overflow as is humanly possible;

That the interstate nature of our streams is such as to make it imperative that the national government shall take direct and complete control of all measures for flood prevention, their efforts to be seconded by the continuance of appropriations by the individual states affected, more particularly as refers to the Mississippi river, which by furnishing drainage to a large territory to which it is in no wise a menace thus becomes a source of great danger to a people who occupied this country and established for themselves homes and enterprises long prior to the existence of present conditions;

That this is the most important question before the American people today, and that should the national Congress fail to give the matter as speedy attention as is possible and arrive at a solution of the problem and arrange for an immediate application of the remedy it is guilty of criminal carelessness in the superlative degree.

Finally, your committee recommends that each and every member of this association use his uttermost influence with the Congressman from his district to secure action along the lines above indicated, first for efficient flood control of our rivers, and after that has been accomplished for the improvement of navigation and the rehabilitation of our river commerce.

We also recommend that all members protest earnestly against appropriations of the public moneys for the purpose of public buildings and other uses of which the country does not stand in urgent need, and that these sums be rather used for rendering safe a large portion of our country that is already inhabited, thus enabling these people to care for themselves and add to the wealth and greatness of our nation and relieve the country of the burden of caring for those who are rendered homeless and poverty stricken by these recurring and preventable dangers.

Following Mr. Miller's report, John M. Pritchard of Memphis, Tenn., submitted the report of the grading rules committee, merely reading it, and afterward requesting that the members make no comment in the meeting until the session of Friday morning.

Adjournment followed.

FRIDAY MORNING SESSION

The convention was called to order Friday morning at eleven o'clock. After a great deal of discussion on various features of the report submitted by Chairman Pritchard of the grading rules committee, it was finally carried. The report as it was carried attests to the broadmindedness of the members of the lumber trade situated in various sections of the country, and operating in the different

divisions which make up the association. The report was a distinct compromise, and well illustrated the spirit of harmony which is manifest in the association's success. Through the new rules all factions were pleased in so far as it was possible to settle the questions favorably.

In connection with the pamphlet of proposed changes in present grading rules, Chairman Pritchard suggested the elimination of the following paragraphs:

On page 3 of the pamphlet under caption Paragraph 5, page 9, eliminate:

"With the exception that in grades of 1sts and 2nds, 5 per cent in measurement may be scant of the standard thicknesses according to the following table:

"1", 1¼", 1½", 2" ..... 1/32" scant.
"¾", 1", 1¼", 1½", 2" ..... 1/16" scant.
"2½" and thicker ..... ⅛" scant."

On page 3 of the pamphlet, under caption Paragraph 1, page 10, eliminate:

"One knot 1½" in diameter."

On page 3, caption Paragraph 2 eliminate:

"Two ½" knots."

On page 3, caption Paragraph 3, eliminate:

"Ordinary season checks or such as occur in drying lumber when properly piled and covered in yard, are not to be considered season defects."

Pamphlet page 3, Paragraph 4, eliminate:

"Stain that will be removed or leave only a slight discoloration after dressing to the standard thickness for dressed lumber, must not be considered a defect."

Pamphlet page 4, under caption "Step Plank," eliminate:

"Grades: Firsts and seconds and common; Widths: 10" to 15"; Thickness: 1", 1¼", 1½" and 2"; Length, 8' to 16'.

"Firsts and seconds must be clear one face and one edge, excepting that three scattered pin worm holes may be admitted in any piece. The reverse face and edge must be sound."

Pamphlet page 9, under caption "No. 2A common and No. 2B common," eliminate:

"Note: There is no restriction to the heart in the grade of No. 2B common. This rule is also to be applied to all grades of No. 2 common where the cuttings are described as sound."

After making corrections where typographical errors occur, Chairman Pritchard refered to pamphlet, page 6, under caption "Firsts," stating that the wording of this paragraph should be changed to read:

"Pieces 4 to 9' surface measure must be clear;
"Pieces 10 to 15' surface measure may have one standard defect or its equivalent;
"Pieces 16' and over surface measure may have two standard defects or their equivalent."

After again referring to typographical errors, Chairman Pritchard said that on page 10, under "No. 1 common," the following should be inserted between paragraphs 3 and 4:

"Pieces 4" wide, 6 and 7' long must be clear."

This ended the discussion of the proposed changes as reviewed by Chairman Pritchard and the meeting was then turned over by the chair to the membership for further discussion, with the result as above noted.

On motion, the convention then adjourned until two o'clock.

FRIDAY AFTERNOON SESSION

The meeting was called to order by the president at three p. m. The first item of business was the report of the committee on officers' reports, which was presented by Chairman O. O. Agler, in which the president and secretary-treasurer were complimented on their efficient work during the past year.

The chair called the members' attention to the fact that the report involved the recommendation raising the dues from $35 to $50 annually, taking effect September 1 next.

The report was then adopted.

Earl Palmer, chairman of the committee on resolutions, presented the report of that committee, which resolutions were adopted per the following:

Resolution urging upon Congress the immediate adoption of legislation for flood protection and reclamation of the flooded sections of the country;

Resolution complimenting the management of the Hotel Sherman for its able handling of the convention;

Resolution thanking L. E. Rollo and the Mendelsohn Club for their entertainment at the banquet;

Resolution to the effect that the National Hardwood Lumber Association protests against turning over to states national forests and other property, the administration of which rightly belongs to the national government;

A resolution of thanks to E. C. Atkins & Co., Inc., Indianapolis, for the badges supplied to the members.

On motion of Thos. E. Powe of St. Louis, the convention went on record thanking J. M. Pritchard and his associates of the grading rules committee, for their efficient and thorough work.

R. S. Huddleston of New Orleans, La., stated that he desired to place in nomination the city of New Orleans as the next meeting place of the association. He read various telegrams from New Orleans' associations urging that New Orleans be selected, and finished with an earnest recommendation of the advantages of that city.

Buffalo, Asheville, N. C., and Philadelphia also made strong pleas for the next meeting.

Under the head of "new business," the discussion as to the time of change effecting the new rules was brought up and after a discussion it was decided that they would go into effect the first of next September. The discussion involved the question as to contracts made under present grading rules, and it seemed to be the consensus of the meeting that that was an individual proposition outside of the jurisdiction of the association, and that nobody could rightly apply any other rule in effect at the time such contracts were made.

The election of officers was the next business before the meeting, the officers to be elected being president, three vice-presidents and directors. A nominating committee of five was appointed by the chair to nominate directors succeeding those whose terms are expiring.

The chair then selected O. O. Agler to assume temporary chairmanship.

On assuming the chair Mr. Agler opened nominations for president for the ensuing year.

W. W. Knight of Indianapolis nominated Charles H. Barnaby of Greencastle, Ind., to succeed himself.

The nomination was heartily seconded, nominations closed and Mr. Barnaby was re-elected unanimously, the secretary casting the ballot.

President Barnaby was escorted to the chair by O. E. Yeager, James Buckley and D. H. Day.

After acknowledging the honor bestowed upon him, President Barnaby opened the nominations for vice-presidents.

J. B. Wall named Orson E. Yeager of Buffalo, N. Y., first vice-president, after which the nominations for that office closed, and Mr. Yeager was elected unanimously.

J. M. Pritchard nominated J. V. Stimson of Huntingburg, Ind., for second vice-president. Mr. Stimson was unanimously elected.

Earl Palmer in a pleasing manner submitted the name of E. V. Babcock of Pittsburgh, Pa., as third vice-president, and Mr. Babcock was also elected by unanimous vote.

The newly-elected vice-presidents then responded with a short talk of acknowledgment.

E. V. Babcock, chairman of the nominating committee for directors, then submitted his report as follows:

DIRECTORS FOR THREE YEAR TERM.

T. M. Brown, Louisville, Ky.; Chas. B. Dudley, Memphis, Tenn.; Oliver O. Agler, Chicago, Ill.; C. A. Goodman, Marinette, Wis.; G. E. Breece, Charleston, W. Va.; J. W. Dickson, Memphis, Tenn.; W. W. Knight, Indianapolis, Ind.

DIRECTORS FOR ONE YEAR TERM.

As successor to E. M. Stark, resigned: W. J. Hetherington, Toronto, Ontario.

DIRECTORS FOR TWO YEAR TERM.

To succeed W. H. Hill, resigned: B. C. Currie, Jr., Philadelphia, Pa. E. V. Babcock, chairman, J. T. Trainer, John M. Wood, C. J. Landeck, F. S. Underhill.

Mr. Babcock stated that the report of the committee was unanimous, and moved its adoption, and that the secretary cast the vote for the members. The vote was seconded and unanimously carried, and the secretary accordingly cast the ballot.

A resolution was then proposed by Emil Guenther of Philadelphia, on the death of E. E. Goodlander of Memphis, Tenn., which was adopted by a rising vote.

The surprise of the convention was then sprung by F. S. Underhill representing the Philadelphia delegation to the convention. Mr. Underhill paid a glowing tribute to somebody whose identity he kept secret until the last moment, when he, much to the sur-

prise of the convention, revealed a silver loving cup, which he presented to J. M. Pritchard, who for six years has been chairman and for eleven years a member of the grading rules committee.

Mr. Pritchard in acknowledging pleaded his inability to make a suitable address of thanks and assured the Philadelphia delegation of his hearty appreciation of its token.

The question of legal effect on all contracts by the adoption of the new rules was then again opened up, and after a discussion Horace C. Mills moved that the motion adopting the rules be amended with the provision that they take effect on September 1 as to new business. This motion was seconded and O. O. Agler then moved that as an amendment to that motion the matter be referred to the board of managers. This motion was also seconded.

Mr. Agler's amendment was carried unanimously. The meeting then adjourned *sine die.*



ENTERTAINMENT

The entertainment features provided included the banquet for the membership held at the banquet hall of the Hotel Sherman on Thursday evening, a dinner for the ladies given in the Italian room of the Hotel Sherman on the same evening; smoker, vaudeville and buffet lunch tendered the men visitors on Friday evening, and a theater party followed by luncheon, music and informal dancing in the banquet hall for the ladies on Friday. The various affairs were not, as last year, given entirely by the Chicago trade. They were subscribed to by most of the members of the National Hardwood Lumber Association and carried out to a successful and enjoyable conclusion in every instance.

E. C. Atkins & Co. of Indianapolis, Ind., manufacturers of the famous silver steel saws, provided the unusually attractive badges, cut of which is shown on this page.

Control of Floods

Editor's Note

The following is an address delivered by George H. Maxwell of New Orleans, La. before the National Lumber Manufacturers' Association at Kansas City, June 3 and 4.

If my memory serves me right I had the pleasure of addressing the convention of this association which met at the New Willard hotel in Washington some years ago in advocacy of the National Appalachian Forest bill, which was passed not very long afterward, in the face of the same opposition we are now meeting in opposition to the Newlands bill. If any one had suggested the substitution of forest preservation and reforestation, or of reservoir construction, for the levee system, much of the argument of the gentleman who has preceded me would be sound, but such is absolutely not the case. Our objection to the levee only system with revetments—is that the best matured judgment of the people behind the levees in the lower Mississippi valley is that the system can be made absolutely secure against the average floods of the average years, but that when you come to the extraordinary floods of the unusual, occasional years a levee system which is supplemented by nothing else never has been secure and never will be; and I refer as authority for that point, gentlemen, to one of the authors of the Ransdell-Humphreys bill who in a letter sent to New Orleans for publication within the last two or three weeks stated, "If everything were done that the bill provides for and this magnificent system of levees built, in some greater flood the levees might be again overtopped."

Now then, the position we stand for is this: Speaking from the point of view of the lower Mississippi valley, that country is entitled to be safeguarded against, not only the average floods, but against the greatest floods of the most exceptional years and it is not safe to develop that country under any other system. I do believe that character of protection for many years to come could be had in the delta of the lower river by supplementing levees with a system of controlled outlets and spillways and I know that the most practical, common-sense men of that country agree with me. I do not hesitate to say it is my personal belief and judgment after studying this a year and a half on the ground, after watching these two great floods pass by, after studying every possible question involved with the water in front of me, that all the losses that have occurred in the last two great floods, probably over $500,000,000, have resulted primarily from the stubborn opposition of the engineers to a system of controlled outlets. Nothing more, and they took care of the excess waters. If those outlets had been controlled outlets and the channels which the waters made across towns and villages had been controlled auxiliary channels, the lower Mississippi valley would not have suffered one dollar from flood damage in the last two years. I am willing to state as far as the lifetime of the men now here are concerned, you can protect the delta with the levee system supplemented by an outlet system as provided by the Newlands bill, but you can not by a system of levees only with revetments.

When we come to look at it from a broad national point of view, I put the question up to you; how just is the plan to people of all sections? I ask you whether you do not think you should give protection to the citizen farmers of the San Joaquin, or the lower Colorado, or the rivers of the west, including the Big Muddy, and the great Ohio valley where it is estimated the annual flood damage is more than $50,000,000 a year and $100,000,000 in the single year before this last one when it was more than $250,000,000. Why should not the interests and rights of these very sections be considered as much as the rights of the lower Mississippi valley? Will you go to Congress and explain this matter before the law-making body of the nation? Are they going to single out one section and say: "We will appropriate $60,000,000 for that section and nothing for the rest." Can you do this when it is absolutely beyond question that you can demonstrate to any fair-minded man that the $60,000,000 is absolutely inadequate to accomplish its purpose? Why, gentlemen, the testimony before the committees in Washington a year ago showed that after the great flood of 1912 the Mississippi River Commission, having increased its estimate for levees from $16,000,000 to $58,000,000 and its estimate for revetments from $80,000,000 to more than $150,000,000, the testimony pointed out beyond all question that if you built a levee system without first building a revetment system, your levee system is in danger at any time of caving into the river. This has happened in the lower valley within the last few months. You remember very well the Remy cave and the Poydras cave. It is true these people by the exhibition of nerve and quickness succeeded in stopping these two breaks before they became crevasses, but if you will get the testimony of Capt. C. H. West last year and read it, you will want no further arguments. It shows that the amount of money appropriated by the Humphrey bill is hopelessly inadequate. If the country is going to take hold of this flood problem and settle it, why not recognize in advance what it is going to cost to do it? What would you think of a business man's proposition to build a

sawmill who would estimate the cost at fifty or seventy-five per cent of what it actually will cost?

Let us do what the Newlands bill does, gentlemen. It realizes the vision of Captain White and puts at least that much of the government activities upon business principles; it recognizes that the Mississippi river does not come up out of a hole in the ground at Cairo; that the same floods which occurred in the Ohio river overran them in the Mississippi. They have never had a flood which did not come from the upper streams.

One of the things which we object to and protest against with reference to this reservoir system is the persistence with which the wrong conception of the matter is given to the people. Nobody proposes to store one-half, or one-fourth, or any large amount of the total volume of water running past a certain point. I spent nearly two years in Pittsburgh as executive director while they raised the money and did the engineering and prepared that wonderful report of 175 pages, and as a result of that investigation they ascertained that with a system of seventeen reservoirs they could lower the crest of the highest flood at Pittsburgh ten feet. If you can lower it ten feet on the Allegheny, if you can lower it ten feet on the Monongahela, if you can do it on every tributary of the Ohio river, if you can lower the floods on the streams coming in from the south, then you have got the channel space to carry every flood that ever will come up from the north, with the levees below Cairo at their present height. You can overcome the danger from the peak of the flood, if you can skim off the crest above the flood line and you have saved the desolation and destruction which that peak will cause. That is all of the reservoir proposition as applied to floods.

In the American Review of Reviews in the articles by Mr. Ransdell and another writer, you will find the extreme point of view of the lower Mississippi valley. In the article of James J. Hill you will find the extreme point of view of the western United States. He knows that rivers can be dried up by the use of reservoirs and irrigation. The Missouri river floods can be controlled by reservoirs and the danger removed by a combination of waters from the Missouri and Ohio tributaries. If you can absolutely prevent the floods of the Missouri river you will not in any year have a flood of water coming from that river to make a combined flood with the Ohio, which will make it possible to protect the lower valley by levees.

If you take two acres of water and set it over 10,000,000 acres of land which is about one-fifth of the available land, you have a volume of water enough to make a flood continuous 3 miles wide, 10 feet deep and 1,125 miles long, and the people of the western country are begging Congress to take that water and put it on that land. Thereby you will increase the productiveness of that country $10 to $100 an acre, or at the minimum increase, over $100,000,000 a year, and make a market for your lumber in that dry western country.

Take the question of soil porosity. This recent flood on the Ohio river came from a rainfall of considerably less than twelve inches upon a comparatively small area of the territory. The total annual rainfall is very close to forty inches. If you take twelve inches of rainfall over that territory and put it into the form of a flood on the Ohio you will have about 100 miles from Pittsburgh to Cairo. You would have a flood 1,000 miles long, 1 mile wide and 200 feet deep, if that twelve inches ran off all at once. Why don't you have it? Because the great reservoir Nature provided in mother earth absorbs the water and regulates the flood.

I have not any more time to take up with these details. The Newlands bill does for the lower Mississippi valley what it needs. There is nothing that can be thought of that the national Government can do in the Ohio valley that is not provided for. The keynote of the Newlands bill is coöperation, unification and construction. In other words, coöperation between the nation and the states and municipalities and districts and individuals. It is true that the Newlands bill does not make it a condition precedent that the state or lesser districts shall coöperate, and therein lies one of the most fatal defects of the Humphreys bill. It says the nation can do nothing unless the local district has previously provided one-third of the necessary expense, or given satisfactory evidence of its intention to provide. If the lower levee district in Arkansas is broke, or discouraged, or dishonest then you leave absolutely at the mercy of the local levee board all the lower end of the state of Arkansas that might be and has been flooded by breaks in the section of the river which it controls. The Newlands bill gives the national government a free hand without being held up by any local levee board for any reason whatsoever.

Under unification it considers the entire river system as a whole. In point of construction this bill provides first an appropriation, then machinery for its expenditure and the proper making of all plans. It gives the President of the United States the same position of oversight that must be occupied by the executive of any successful corporation. It provides for immediate construction and we will come to an end of this intolerable period of perpetual political investigation and pass to a period of actual development, if this bill becomes a law.

There are three engineers appointed by the President and in addition the chief of engineers of the United States Engineer Corps, the chief of the United States Reclamation Service, the chief forester and the chief of the Topographical Survey. You want to get these men all on the board and you want the head of the Reclamation Service there who has spent $80,000,000 in building reservoirs. You want the chief of the Topographical Survey, the chief of the Forest Service, who has in hand the preservation of timber at the headwater. You can not disconnect these men from the proposition any more than you could disconnect the pole of the wagon from the wheels and expect it to run. When you have got these men together, what does the bill provide for? I will quote briefly from the index of its divisions.

First, the appropriation of $60,000,000 annually for ten years. If you are going to appropriate $60,000,000 for the lower Mississippi, how much more for the Ohio? the Missouri? for the whole West? for the upper Mississippi? Whenever you get to a point where you have provided for the entire country by any system of specific local appropriations you will have appropriated more than $60,000,000 annually. You must recognize the rights of the people of the other sections to protect themselves through their members and they will never vote for $60,000,000 for the lower Mississippi unless recognition is given to the needs of their own constituents.

The bill further provides for the coöperation of states; the coördination an coöperation of government bureaus; reference to and instructions from the President; provisions for information and education of the people, which in my judgment is the only opening from the political evils so eloquently presented by one of the gentlemen who addressed you yesterday. If these different departments of the Government are at present entitled to existence then they are entitled to have their work made specific and effective in protecting the country from such disasters. The Newlands bill does that, and that is all it does.

Alabama's Timber Resources

THE University of Alabama, at Montgomery, has just published a book of 230 pages on the forest resources of that state. The work was written by Dr. Roland M. Harper, a well-known botanist and geologist, who has compiled a number of excellent reports on southern resources, particularly in relation to Georgia, Alabama, and Florida. The present work shows the result of care and thoroughness on every page. Those who may be interested in Alabama's timber will find Dr. Harper's report of great value, as it covers the state, region by region, and lists the various woods and gives the best available information in regard to quantity and quality. The total number of tree species in Alabama is placed at 121. Some of these, of course, are of little commercial importance, while others possess great value. It may be noted that the writer expresses a refreshing hopefulness in the future. He believes that Alabama will have a good deal of good timber for a long time. The prospectus announces that it will be sent to any interested party who remits seven cents for postage.

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 467—Wants Cocobola and Ebony Logs

Toledo, O., May 21. Editor HARDWOOD RECORD: We are in the market for cocobola and ebony in the log. Can you give us the names and addresses of reliable brokers in the United States and abroad?

——— MANUFACTURING COMPANY.

The writer of the above letter has been supplied with information covering sources of supply for these logs. Any others interested in the inquiry can have the address of the writer on application.—EDITOR.

B 468—Seeks Preventive for Log Checking and Splitting

North Wales, Pa., May 21.—Editor HARDWOOD RECORD: Kindly advise what you have to offer in the way of a solution for the prevention of checking, splitting and rotting of lumber. We believe it would be advisable to cover the ends of 10-4, 12-4 and 16-4 planks and squares with some substance that would prevent same from cracking up.

O. M. WEBER COMPANY, Inc.

To the above writer lorac, manufactured by The George Henke Company, 68 Beekman street, New York, has been recommended as the material believed to be the best known for the purpose named.—EDITOR.

B 469—Seeks Market for Sawdust

Montgomery, Ala., May 21.—Editor HARDWOOD RECORD: Kindly advise if you know of any market for band sawn poplar sawdust or band sawn oak sawdust in car lots. ——— LUMBER COMPANY.

The writer of the above letter has been advised that while we know of no specific market for sawdust, a large quantity is employed for horse bedding, packing and in the form of wood flour for the manufacture of dynamite, powder, and for other purposes. Anyone interested in a source of supply can have the address of the above concern on application.—EDITOR.

B 470—Seeks Market for Canadian Birch Timber Limits

Montreal, Que., May 27.—Editor HARDWOOD RECORD: The writer is interested in options in birch timber limits which can be bought for from one dollar to two dollars per thousand on the stump. It is possible to buy large areas of such timber, much of it from four to eight miles from railroad. It will require quite a large capital to turn this into lumber, but there will be a large profit when this is done. If you know of any one with capital looking for a birch timber proposition to work up, I wish you would kindly put them in touch with the writer, who is a practical lumberman and timberman, but lacks the necessary capital to develop a proposition of this size in the proper manner.

The writer has a ready market for all basswood and birch lumber that can be produced in this section. ———.

Anyone interested in securing native hardwood stumpage can have the address of the writer on application.—EDITOR.

B 471—Prevent Checking and Splitting of Loblolly Pine Columns

Bryson City, N. C., May 27.—Editor HARDWOOD RECORD: We manufacture solid bored colonial columns. For some time we have been experimenting with our native loblolly pine for this purpose. On account of the resin, turpentine and pine oil in them we boil them in water to get them in condition to take paint. Our customers say they check and split badly. Can you suggest any remedy or refer us to any one whom you think might help us out in this?

BRYSON CITY PUMP WORKS COMPANY.

It has been suggested to this concern that it is likely that the employment of steam under pressure in treating its columns, as practiced by the Kraetzer preparator system, an apparatus manufactured in Chicago, might constitute a panacea for its trouble.—EDITOR.

B 472—Current Hardwood Prices

Columbus, O., May 26.—Editor HARDWOOD RECORD: I submit below a record of a few recent actual sales of various items of hardwoods that may constitute a guide of current values. These sales were as follows, F. O. B. cars Toledo, O.:

3 cars 4-4 No. 1 common ash	$36
4 cars 8-4 log run southern beech	33
4 cars 3-4 log run black gum	17.50
4 cars 4-4 sound wormy oak	31
5 cars 4-4 No. 2 common oak	28
5 cars 5-4 No. 2 common A poplar	29
2 cars 4-4 log run buckeye	24
1 car 4-4 log run sycamore	24
2 cars 9-4 good bending oak	51
2 cars 6-4 log run elm	28.50
2 cars 4-4 firsts and seconds plain red oak	60

B 473—Seeks Cherry and Poplar

Camden, N. J., May 21.—Editor HARDWOOD RECORD: We are in the market for 4-4 No. 2 common cherry, 4-4, 5-4, 6-4 No. 1 common cherry; 16-4 white ash; 6-4 and 8-4 clear sap poplar. Can you give us the names of any manufacturers who produce high-class lumber of these kinds and grades? ——— LUMBER COMPANY.

The writer of the above letter has been furnished several possible sources of supply for the stock sought. Any others interested in the inquiry can have the address of the writer on application.—EDITOR.

B 474—Seeks Copy 1905 National Hardwood Rules

Sturgis, Mich., May 24.—Editor HARDWOOD RECORD: Please favor us with a copy of the old National rules of inspection as adopted in 1905. In case you have no copy, can you advise where we could obtain one? We should greatly appreciate the favor at this time.

——— FURNITURE COMPANY.

The writers of the above letter have been advised that so far as we know the 1905 National rules are out of print, and certainly are out of use, and that we cannot supply them with the edition in question.—EDITOR.

B 475—Seeks Oak Flooring and List of Veneer and Panel Manufacturers

San Francisco, Cal., May 22.—Editor HARDWOOD RECORD: I am a student of your valuable paper, and should like to have you supply me with a list of manufacturers of square-edged and T. & G. oak flooring. Also a complete list of manufacturers of elm veneer and elm panels as well as of gum veneers and gum panels. ———.

The writer of the above letter has been supplied with a list of oak flooring manufacturers, and a small list of manufacturers of veneers and panels named. Any others interested in developing a Pacific coast trade in these items can have the address on application.—EDITOR.

B 476—Seeks 4-4 Sap Gum Panels

New York, N. Y., May 22.—Editor HARDWOOD RECORD: Would be obliged if you could furnish us with the names of some responsible shippers who can make glued-up stock in 1 inch sap gum. ———.

The writer of the above letter has been furnished with a brief list of producers of sap gum panels. Any other manufacturers interested in the inquiry can have the address of the writer on application. EDITOR.

B 477—Want Information About Wood Flour

Muskegon, Mich., May 27.—Editor HARDWOOD RECORD: We are interested in an article appearing in the May 25 issue of HARDWOOD RECORD. The article referred to is on page 31 and entitled "The Wood Flour Business." We manufacture school furniture and in the course of manufacture we have a good deal of hard maple sawdust, which might be reduced to wood flour if there were sufficient inducement to justify the additional expense of installing the necessary equipment. We produce a matter of two or three barrels of very fine sawdust per day, which we believe might pass for wood flour, providing it was diverted from our wood blower system and separated from the coarser dust. We note that the article states that in addition to the dynamite industry there are quite a number of other uses.

We would appreciate any information that you might be able to give us which would enable us to get in touch with the possible consumer of wood flour and the equipment required for reducing ordinary sawdust to wood flour. ———.

Montreal, Que., May 27.—Editor HARDWOOD RECORD: The writer is interested in a birch flooring plant near Montreal which cuts six million or more feet of birch lumber a year. We naturally have lots of kiln-dried sawdust, and I noticed in your last issue there was quite a demand for this product in different grades. Now, where can we get a market for it, what will it cost to regrind it if necessary, where are the markets, and what is it worth?

If you know anything about the question, kindly let me hear from you. ———.

The writers of the above letters have been advised that the wood flour of commerce is largely manufactured in Norway and Sweden from sawdust which is first ground in old-fashioned mills such as were used in the United States to grind corn and rye. The sawdust is made very dry before grinding, and precaution is necessary to keep it from igniting while passing through the mill. Germany and England are large buyers of the flour and considerable of it is shipped to the United States. It is worth about $10.00 a ton at the mill. There seems to be no report of its manufacture in this country.

Wood flour is used in the manufacture of dynamite, linoleum and artificial flooring resembling tile. It is a substitute for cork in linoleum, but is not considered the equal of cork for this purpose.

Some of the German warships use it in composition form for decks because it does not splinter like wood.

The flour is ground very fine and is bolted before becoming salable.

It is safe to say that even the finest sawdust, even that coming from the sander belts, would not be fine enough for wood flour purposes without additional grinding. The writer recalls during a talk with the manufacturer of the composition floor referred to at a recent cement show at Chicago that this manufacturer said he had considerable difficulty in getting wood flour and that he was unable to secure anything of anywhere near the required fineness in this country. It may be that American manufacturers would not have the patience to grind it long enough, or it might be also that the grinding would take such a long time that, with the more expensive labor in this country, it would not make a paying proposition. We do not know of any machines manufactured for the purpose of grinding sawdust. However, a home-made contrivance might be rigged up for the purpose.—EDITOR.

B 478—Opportunity in Handle and Spoke Making

The owners of a foremost spoke and handle making operation in California, which employ eucalyptus as a raw material, and which have a larger volume of business than they can handle on present capital, seek to sell an important interest in their business, and secure the services of a first-class practical manufacturer in connection wtih the enterprise. An unlimited quantity of raw material is obtainable at low price. They have a fine manufacturing plant, and a large market at good profit available.

Anyone interested in this proposition can have the address on application.—EDITOR.

B 479—Seeks Oak Squares

Buffalo, N. Y., May 29.—Editor HARDWOOD RECORD: We are in the market for two or three carloads 2x2 46 inch oak squares. Can use either white or red, or mixed oak.

——— FURNITURE COMPANY.

Anyone interested in this inquiry can have the address of the writer on application.—EDITOR.

B 480—Seeks White Cedar Fence Rails

Philadelphia, Pa., May 29. Editor HARDWOOD RECORD: We are in the market for a carload of 11 feet white cedar fence rails. Please put us in communication with some one who produces this stock.

——— LUMBER COMPANY.

Anyone interested in the above inquiry can have the address of the writer on application.—EDITOR.

B 481—Wants Glued-up Panel Stock

Philadelphia, Pa., May 27.—Editor HARDWOOD RECORD: We want to purchase ¼ inch three-ply glued-up panel stock, one and two good sides in plain oak, quartered oak, birch and poplar. We use this stock in 30x60 inch and 24x66 inch; could also use it in smaller sizes.

Could you put us in touch with some one who makes this stock? We would appreciate it very much if you would let us know to whom we could write for price on same. ———.

The above party has been supplied with a few sources of supply for this material. Any others desiring the address of the writer can have same on application.—EDITOR.

News Miscellany

Annual Grand Rapids Lumbermen

The annual meeting of the Grand Rapids Lumbermen's Association took place on the evening of May 27 at the Hotel Pantlind, Grand Rapids.

Following the dinner, the meeting opened with the report of Retiring President W. E. Cox. Mr. Cox said that he was well satisfied with the record of the association during the past year. He said that, while few problems presented themselves, what questions did come up were met in a united manner by the association. He spoke favorably of the spirit of association which has permeated all discussion, whether the opinions on certain questions were unanimous or not.

President Cox said that the most important work of the association during the year was its efforts to retain for its members a reasonable reconsignment privilege from the railroads. He said that the seeming hostility of the Interstate Commerce Commission toward such privileges threatened their withdrawal and said that had they been withdrawn Grand Rapids lumbermen would have received a serious blow.

The speaker commented on the work of the transportation committee and of the traffic expert of the association, E. L. Ewing. He said that they did splendid work in connection with the reconsignment arrangement and that this achievement alone justified the existence of the organization.

The speaker called the members' attention to the fact that many Michigan roads will soon issue new lumber tariffs, and stated further that E. C. Leavenworth, chairman of the committee of Michigan railroads, has invited the members to make suggestions that will enable his committee to make their tariffs more practical. He said that Mr. Ewing and Mr. Foote have already conferred with the railroads and the probable outcome will be that the lumbermen will secure favorable tariffs.

Treasurer G. W. Perkins, Jr., reported that the association had a balance on hand of $480.61.

The annual election resulted in the selection of the following officers for the coming year:

PRESIDENT—Earle Crossman.
FIRST VICE-PRESIDENT—H. P. Newton.
SECOND VICE-PRESIDENT—Henry Schneider.
SECRETARY—A. M. Manning.
TREASURER—W. E. Vogelsang.

The new president made a short talk, in which he signified his intention of adhering to the policy of his predecessor. Secretary Manning and Treasurer Vogelsang also acknowledged the honor.

One of the most interesting talks following the regular business meeting was that delivered by M. C. Huggett, secretary of the Grand Rapids Association of Commerce. He talked on the "City Beautiful."

Other features were a talk by Frank Welton on "Boyhood Days," and musical numbers by the Misses Schneider.

Following the dinner and speeches the floors were cleared and dancing was enjoyed.

Semi-Annual Baltimore Exchange

The Baltimore Lumber Exchange at its semi-annual meeting held last Monday evening, June 3, 1913, at the Merchants' Club on German street, took action of considerable importance to hardwood men, a resolution being adopted which provides that all lumber condemned by inspectors of the exchange shall be put into a separate talley and that no charge for such lumber shall be made. The resolution which was offered by William M. Burgan and amended so as to include the entire range of woods, soft as well as hard, and of every size and dimension, reads as follows:

"That all inspectors be instructed to keep in separate column all absolutely worthless lumber, and that no charge be made for this lumber, except the charges for inspection, this rule to apply to lumber of every kind."

The subject was brought up by some of the buyers of low-grade yellow pine, who contended that it was an injustice upon them to require payment for condemned lumber at one half the price agreed upon for the parcel, under the standing rule of the exchange. Considerable discussion was provoked with the result stated. The action taken abrogates a regulation of the exchange which has been in force for years.

Another matter that came up at the monthly meeting of the managing committee of the exchange held in the afternoon was a communication from some of the hardwood members, who expressed much concern over the proposed substitutes which have been recommended by the inspection rules committee of the National Hardwood Lumber Association.

The business meeting of the exchange, at which the half-yearly reports were read, showing the organization to be in excellent condition, was followed by an excellent luncheon.

Arkansas Dealers to Meet

The Arkansas Association of Lumber Dealers will hold its ninth annual convention in the Marion hotel at Little Rock on Monday and Tuesday, June 9 and 10. A program which promises to be both interesting and profitable has been arranged for the convention, and everything indicated that this will be the best meeting in the history of the association.

The opening session of the convention will convene at ten o'clock on Monday, and the lumbermen will be welcomed by the Honorable J. M. Futrell, acting governor of Arkansas. L. R. Putman of the Northwest Arkansas Lumber Company, Fayetteville, Ark., will make the response to the welcome address on behalf of the association. According to the program these addresses will be followed in rapid fire order by addresses, talks and discussions on subjects of vital interest to the lumbering interests of Arkansas and the Southwest.

The sessions of this convention will be attended by practically all of the retail lumbermen in Arkansas, and by many prominent retail lumbermen from various parts of the Southwest. A large number of manufacturers and wholesale dealers in lumber and allied products are also expected to be represented at this convention.

The association has arranged to entertain all its members, together with visiting lumbermen, Hoo-Hoo and ladies at luncheon on Monday.

The lumbermen's convention, which will adjourn at noon on Tuesday, June 10, will be followed immediately by the annual festivities of the Concatenated Order of Hoo-Hoo. A concatenation will be held in the afternoon at two o'clock. T. J. Gay, vicegerent of the central district of Arkansas, has authorized the statement that a large number of kittens will be on hand for the occasion, and he promises a royal time to all members of the order who attend these festivities. An enjoyable time is also promised for the evening's entertainment which will consist of an excursion up the Arkansas river on the Steamer Grand. Music with dancing and refreshments have been provided for the entertainment of the guests while on this ride.

National Salesmen's Annual

The National Association of Traveling Lumber and Sash and Door Salesmen met at the Lumbermen's Club of Chicago on May 24 in its annual meeting. Salesmen of various states of the country acted as delegates for their respective associations. Various problems were discussed and interesting talks given. Among the speakers were E. H. Defebaugh, E. E. Skeele, D. J. Daniels, A. B. Simonson, L. E. Fuller and President Ransom Griffen.

A resolution was adopted urging the discontinuance of transit shipments as it was contended that a transit car must necessarily be sold by several salesmen, while only one can get the commission going with the sale.

The following officers were elected for the coming year:

PRESIDENT—A. C. Quixley, Chicago.

FIRST VICE-PRESIDENT—A. B. Simonson, Springfield, Ill.

SECOND VICE PRESIDENT—George L. Maas, Indianapolis, Ind.

SECRETARY TREASURER—T. H. Nelson, Indianapolis, Ind.

Eighth Annual Tournament Lumber Trade Golf Association

The program of the eighth annual tournament of the Lumber Trade Golf Association, an eastern organization, to be held at Garden City, Long Island, June 10 and 11, indicates that this will be interesting throughout.

The annual club dinner will be held Tuesday evening, June 10, at 6:30 at the Salisbury Golf Club. The dinner will be followed by the annual meeting. The Hotel McAlpin, Broadway and Thirty-third, New York, has been selected as headquarters during the tournament. The participants and gallery can catch trains at frequent intervals from the Pennsylvania station, taking them direct to Garden City.

The tournament will consist of eight events, which will give the participants ample opportunity for demonstrating their ability under varying conditions.

Philadelphia Lumbermen Play Golf

The second game of the Philadelphia Lumbermen's Golf Club came off on the famous White Marsh Valley Country Club's golf course, through the courtesy of J. W. Turnbull of the J. W. Turnbull Lumber Company, on May 20. Thirty-two players divided into seven foursomes, one twosome and two singles entered the game, which resulted in the first prize, a silk umbrella, going to Ben C. Currie, secretary of the club, with a net score of 81; the second prize, a handsome cane, fell to Horace A. Reeves, Jr., for 82, and the consolation prize, a golf cap, descended upon the head of Benjamin Stoker for 122.

After a sumptuous dinner served in the clubhouse, the regular meeting was called to order by President Frank Buck. Only routine business was transacted. Mr. Buck, who has just returned from an extended tour of Europe, entertained the members with some humorous experiences while abroad. The irrepressible Ben C. Currie read an address purporting to have been made at the previous meeting of the club by the proverbially reticent Winfield Allen, who, whatever other distinguishing thing he may do, recoils at the mention of a speech. It was followed by roars of laughter and it was regretted that Mr. Allen was called away, as he would have enjoyed the joke, although the victim.

June Meeting of St. Louis Club

The June meeting and dinner of the Lumbermen's Club of St. Louis is being held this evening, Tuesday, June 10, at the Glen Echo Country Club, one of the most exclusive and handsome country clubs in the country. The ladies participated in the dinner and meeting. A reception at the club house was held between 5:30 and 6 o'clock, and was followed by an inspection of the club house and the grounds. Dinner was served between 6:45 and 8:15, a special menu having been arranged. During the dinner there was instrumental and vocal music, and short stories and anecdotes were told by the members. Then followed an address by N. D. Darling, of Oklahoma City, Okla. When this was finished, the Schnitzel Bank was sung. The song made a big hit at the German night meeting of the club, which was held at Faust's Restaurant in April. A special request had been made to have the song repeated so the ladies could hear it. Music and dancing followed until 10:30.

Northern Cut and Shipments for April

Considerable satisfaction will be felt on the part of the wholesale trade in a recent statement emanating from the office of the Northern Hemlock and Hardwood Manufacturers' Association. According to this statement, the lumber production among the members of that organization was twenty per cent greater in April than in March. This was due in a measure to the resumption of hemlock sawing by many mills. In addition, shipments of hemlock for April were fifteen per cent greater than in March, while hardwood shipments were sixteen per cent less. This latter condition is attributable to the shortage of dry stocks.

Summary of reports during the last twelve months shows that during the period up to the first of May hemlock shipments exceeded cut by thirty per cent and hardwood shipments exceeded cut by nine per cent.

Executive Committee of National Wholesalers Meets

The executive committee and the trustees of the National Wholesale Lumber Dealers' Association met at headquarters of the association in New York City on May 22 and 23 respectively. The affairs of the organization were fully discussed at the meetings and other matters of interest to the membership were gone over, such as the wood vs. fibre box case, the proposed general advance in freight rates over eastern railroads and the revised ruling of the railroads in the car stake equipment case, which was said to work a hardship on lumber shippers. This matter will be given special attention by the committee having the general subject in hand.

Organization of the Subcommittees Representing the Forestry Committee of the National Conservation Congress

Realizing the great need of constructive work in matters of forest conservation, the foresters and lumbermen in attendance at the fourth National Conservation Congress in Indianapolis last year held several informal meetings out of which grew a new plan for awakening public sentiment, and for collecting, compiling and disseminating reliable data on forestry and lumbering. President Charles Lathrop Pack promptly offered the endorsement and facilities of the National Conservation Congress and constituted the forestry committee of the Congress a body to direct the work of sub-committees. The standing sub-committees are broadly representative and to them has been delegated the collecting of complete and reliable information on the assigned subjects, and its compilation into reports which will be practical and authoritative to the last degree.

The financial end of the work has been liberally provided for by a special fund donated by the American Forestry Association, and the same association will use its magazine and other facilities in giving publicity to the Forestry Committee's findings.

The forestry committee of the Congress as appointed by President Pack, consists of Henry S. Graves, chairman, J. B. White, E. T. Allen, W. R. Brown and E. A. Sterling, secretary.

The standing sub-committees are made up of men representing the best knowledge on each subject assigned. Their work has been outlined definitely to avoid repetition of endeavor under the direction of the forestry committee. The sub-committee subjects are: Publicity, Federal Forest Policy, State Forest Policy, Forest Taxation, Forest Fires, Lumbering, Forest Planting, Forest Utilization, Forest School Education, Forest Investigations.

Carolina Rate Advances Suspended

On May 29 the Interstate Commerce Commission suspended southern tariffs showing advanced rates from Tennessee, Georgia and North and South Carolina to cities in Virginia, the eastern seaboard and interior eastern points. The advances proposed ranged from one-half to five cents a hundred pounds. The new tariffs are suspended until September 27.

New Treating Plant of the Baltimore & Ohio Railroad

The Baltimore & Ohio railroad has just put into operation its new timber treating plant at Green Spring, W. Va. The new plant is one of the most complete and modern timber treating plants in America. It covers sixty acres and is situated close to large areas of timberland along the valley of the south branch of the Potomac river. The requirements of the Baltimore & Ohio system approximate 2,500,000 ties annually for renewals and, with a new plant in operation, a large percentage of these ties will be treated by the company. Other timber for railroad purposes will also be treated.

The new plant is equipped with two treating cylinders or retorts 7 feet in diameter by 132 feet long, made of ¾-inch steel, and built for a working pressure of 175 pounds to the square inch. Each of the retorts rests on nine-foot concrete piers. The pressure tanks are 8 feet in diameter and 14 feet high. They are really a combination of pressure measuring and drain tanks and are located in such a way that they are readily filled while the treating cylinders are being filled preparatory to treating a charge of timber. Compressed air is then applied through the tops of these pressure tanks and the preservative is forced through a pipe in the bottom connected with the cylinder. The pressure is maintained until entire absorption is obtained in the timber, after which the valve is closed and any preservative remaining in the tank can be returned to the working tank by means of the compressed air already in the pressure tank.

The plant contains many other novel features making it not only unique but entirely modern in every particular.

Conditions at Hamburg

A report from a prominent lumber house at Hamburg, Germany, states that business activity during April showed but little change from the previous month. The demand was somewhat better, although the political situation made buyers very cautious of making purchases ahead. The report stated, however, that improved conditions were anticipated during May.

The demand for black walnut continued satisfactory, especially for the upper grades. Quotations were advanced during the month. The demand for white oak was fair during April. A few lots were offered,—probably shipped from old contracts,—at figures below the ruling market prices. There was a good inquiry for cottonwood, prices remaining firm. These stocks met with a ready sale. A few sales at steady prices were made on tupelo gum.

Forest Service Contemplates Purchasing Biltmore Estate

The National Forest Reservation Commission is now engaged in inspecting the Pisgah forests of the Biltmore forest estate of George W. Vanderbilt in North Carolina. The commission accompanied by Chief

Forester Graves, W. L. Hall, chief of the Appalachian division of the Forest Service, and George Otis Smith, director of the Geological Survey, left Washington for Asheville on May 29. The proposed purchase involves 86,000 acres of hardwood stumpage, and is made subject to a twenty-year cutting time contract taken over recently by a logging company.

Death of Harry A. Rankin

Harry A. Rankin of Harry Rankin & Co., attorney-in-fact for the Manufacturing Lumbermen's Underwriters of Kansas City, died at his home in Goshen, N. Y., on June 2. Mr. Rankin has been failing in health for some time and his death while a shock to his associates, was not entirely unexpected.

Harry Rankin was born in Lawrence, Kan., in 1863. He was a graduate of the Kansas State University and later attended U. S. Naval Academy at Annapolis in the class of 1883.

He first entered the fire insurance business as a local agent at Lawrence, Kan., moving to Kansas City in 1888, where he soon became a member of the firm of Kinney, Medes, Crittenden & Rankin. This firm was distinct from the fire insurance firm of Kinney, Medes & Crittenden, and wrote only steam boiler, casualty and employers liability insurance. Later, on the retirement of Messrs. Kinney and Crittenden, the fire insurance and liability business was combined and conducted under the firm name of Medes, Rankin & Medes. In 1894 Mr. Rankin retired from this firm and, establishing the Harry Rankin agency, built up in a short time a very large insurance business, making a specialty of grain and lumber lines.

Owing to difficulties which he experienced in placing lumber lines under rates and forms fair to the assured he, after a thorough investigation of lumber insurance conditions throughout the South, conceived the idea of applying the principles of inter-insurance to manufacturing lumber plants. As a result he organized the Manufacturing Lumbermen's Underwriters and in November 1898, with only eleven members, they began issuing small policies. As the plan promised such decided benefits to lumbermen, its growth was rapid and Mr. Rankin soon associated with him Guy H. Mallam, who at that time was connected with the Texas Tram & Lumber Company, at Beaumont, Tex., and well and favorably known throughout the South. As Mr. Rankin at that time still retained his local agency business, the management was conducted in the name of Guy H. Mallam & Co., until the dissolution of their partnership in November 1905, since which date the attorneyship, until very recently, has been in the name of Harry Rankin & Co., with Warwick Benedict as manager during the past seven years.

Foreseeing the inevitable, the attorneyship was last month transferred to Rankin-Benedict Underwriting Company, the business now being conducted in that name.

Mr. Benedict was also born in Lawrence, Kan., in 1873, and, going to Kansas City a few years after Mr. Rankin, was employed by the firm of Kinney, Medes & Crittenden as office boy, later becoming their Kansas City, Kan., representative. When Mr. Rankin went into business for himself, Mr. Benedict went with him and soon after the organization of the Manufacturing Lumbermen's Underwriters became special agent and adjuster. He was of material assistance in increasing the membership of the organization and upon Mr. Rankin's removal to New York, took up the active management.

The remarkable success of mutual insurance among lumbermen is a direct evidence of the feasibility of the plant. At the time the idea was first started rates, policy forms and adjustments in most sections of the country were very unsatisfactory and often very unfair. Through the success of the association Mr. Rankin represented and other similar associations, lumbermen have been greatly benefited in insurance matters.

From a very small beginning in 1898, the Manufacturing Lumbermen's Underwriters has gone to a membership of 380, and has nearly $30,000,000 of insurance in force.

C. C. Hagemeyer, New President Lumbermen's Club of Cincinnati.

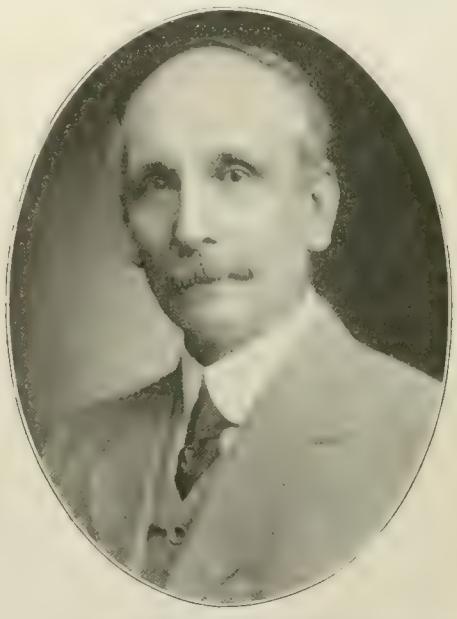
The members of the Cincinnati Lumbermen's Club are to be congratulated on their selection of C. C. Hagemeyer as president of the club. Mr. Hagemeyer, middle-aged and in the prime of his life, with the benefit of his long experience in the hardwood as well as the yellow pine lumber business, is well fitted to take up the many problems that confront such an organization as the Lumbermen's Club. Aside from being a very successful business man, he possesses a certain calm reasoning power that is hard to explain but has been very effective in solving difficult business and club problems, and his advice has been frequently sought and cheerfully given. His business career dates back to about 1867, when he started the Licking River Lumber & Mining Company at Boston Station, Ky., which continued until 1880. In 1881 he started a mill at Butler, Ky., and this was continued until all of the large amount of timber owned by the company had been cut out; this operation closing up three or four years ago. In 1895 he started the Covington Lumber Company of Covington, Ky., a retail yard handling yellow pine and all kinds of yard stock, and carried on this business together with a number of line yards until 1911, at which time he sold out to the Veith & Sweighert Lumber Company, the present owners. In 1901 with H. L. Mickle he started the H. L. Mickle Lumber Company, wholesale dealers in yellow pine, and this business has grown to large proportions, Mr. Hagemeyer still taking a very active part, and last January purchased Mr. Mickle's interest. Mr. Hagemeyer also started the Tennessee Lumber & Coal Company at Glen Mary, Tenn., in 1908, having purchased a large supply of timber and erected a modern mill at that point. This plant was in charge of his son, Hall Hagemeyer, with the general offices at Cincinnati. Mr. Hagemeyer is very enthusiastic in club affairs and his ability and business experience insures a successful year for the club.



THE LATE HARRY A. RANKIN, HARRY RANKIN & CO., KANSAS CITY, MO.



WARWICK BENEDICT, RANKIN-BENEDICT UNDERWRITING COMPANY, KANSAS CITY, MO.



C. C. HAGEMEYER, NEW PRESIDENT OF THE CINCINNATI LUMBERMEN'S CLUB, CINCINNATI, O.

Pennsylvania Company Plans Improvements

The Pennsylvania Company contemplates extensive improvements in Baltimore, the nature of which was outlined by President Rea May 29 at a conference with Mayor Preston and other city officials. The plans proposed include the erection of a great freight terminal station, extending along Calvert street from Bath to Madison streets, a distance of four or five blocks. The station, together with improvements under consideration at Bayview and Canton, would call for an outlay of about $10,000,000. Under the plan, as proposed, the present Calvert station would be closed for passenger traffic, or at the most, the company would provide for a second story station to serve the needs of local traffic only. The projected closing of the station is likely to call forth the most determined opposition. When the railroad company planned the abandonment of Calvert station three years ago the residents along the line of the Northern Central Railway who traveled on the accommodation trains sent out

from Calvert station, went to the legislature and secured the enactment of a law compelling the Pennsylvania to continue the service and put on a number of trains that had been taken off. Mayor Preston says he will insist upon the electrification of the entire Pennsylvania system in Baltimore as a means of getting rid of the smoke nuisance. The creation of a big down town central station is also being agitated. It is altogether likely that the municipality will employ expert advice with a view to devising plans that will not only serve the present needs of the railroads, but furnish a basis for the permanent solution of the railroad problem along the lines of proper development.

New Nashville Consolidation

On May 19 the Tennessee Hardwood Lumber Company and the Althauser-Webster-Weaver Lumber Company, Inc., of Nashville, Tenn., consolidated under the name of the former company, making the combined capital stock $50,000. All the former stockholders of the Tennessee Hardwood Lumber Company retained their interest in the new concern, and in addition D. Weaver and W. E. Althauser of the last named company secure additional stock in payment for the property of their concern. These two gentlemen have purchased the interest of Charles Webster.

The office and yard of the new company will be continued at the site of the present business of the Tennessee Hardwood Lumber Company in West Nashville. T. B. Johnson will be president of the new company and D. Weaver secretary and treasurer.

The consolidation will give to the newly organized Tennessee Hardwood Lumber Company the output of the band mill of the Althauser-Webster-Weaver company operating at Farmersville in Wayne county, Kentucky. In conjunction with this the new company will acquire a considerable area of hardwood timber, consisting mostly of white oak adjacent to this mill and further about half a million feet of hardwood lumber now on sticks at the mill yard. The Tennessee Hardwood Lumber Company has been marketing the output of the Forked Deer Lumber Company, a concern located at Jackson, Tenn., but affiliated with it, and in addition has smaller mills at different points in Tennessee. The aggregate will give it a daily output of about 45,000 feet of hardwoods running principally to oak and red gum. The plan is to ship the bulk of the lumber direct from the mills, but the big wholesale yard will continue at West Nashville.

Mowbray & Robinson Interests Expand

The Burgess Brothers Lumber Company was organized recently by prominent Cincinnati lumbermen. The new company is backed by The Mowbray & Robinson company, Cincinnati, and will have its headquarters in Brooklyn, N. Y., operating as an eastern branch of the Cincinnati firm, handling all the hardwood lines turned out by the company's three mills in Kentucky. In addition it will look after the export end of the business. The company is established at its large yards at White and Delevan streets, Brooklyn, where preparations have been completed.

Edgar Burgess and his brother, J. C. Burgess, are actively in charge of the new company. J. C. Burgess has been for years connected with the Mowbray & Robinson Company, while both he and his brother have excellent reputations as lumbermen and business men.

The incorporators are: Edgar Burgess, E. O. Robinson, F. W. Mowbray, C. W. Bennett and D. R. Rehbuk. F. W. Mowbray is president; E. O. Robinson, vice-president; Edgar Burgess, treasurer, and J. C. Bennett, secretary. Capital stock is $50,000.

New Building for New York State College of Forestry

On May 24, Governor Sulzer of New York state signed a bill providing for the construction and maintenance of new buildings for the State College of Forestry at Syracuse, N. Y. The bill provides an appropriation of $250,000, and was passed without opposition.

Cornell University made a determined fight to prevent the signing of the bill for the buildings for the college at Syracuse, but was unsuccessful. The State College of Forestry as now organized is the state institution designated and supported by the state for the training of men for the profession of forestry, and to give practical training in forestry in the State Rangers' School in the Adirondacks.

The Hardwood Crating Business

Leaving aside entirely the matter of boxes and the material entering into boxes and box shooks proper, there is an enormous business in hardwood lumber used for crating purposes. It is a big enough business that a veteran dealer of considerable prominence in the trade remarked recently that he had about made up his mind not to handle as a dealer anything above No. 1 common in hardwood, and confine his business in the upper grades to the high-grade stock manufactured by his own mills. This dealer went on to explain that he had quite a big business in low-grade stock, especially in crating material, which he supplied on contracts year in and year out to regular customers who use considerable quantities.

There is hardly anything in the hardwood line but what it is used more or less in crating. This includes birch, maple, beech, oak and the harder woods, as well as poplar, gum, cottonwood and linn. There are many prominent users of crate stock and a great multitude of other users not taking such a large quantity but in the aggregate making up an enormous trade. The manufacturers of bath tubs and sanitary ware use hardwood by the million feet for crating and shipping their product. The manufacturers of stoves and heavy hardware also use enormous quantities of crating, and on all sides there is crating, not only more of it in the original channels than formerly, but railways now require the crating of lots of articles which were formerly shipped without crates and all this has served to add wonderfully to the volume of crating stock required.

There was a time when the bulk of this crating stock was of the soft-woods, including white pine, basswood, spruce and a few other species. Pine and spruce is still used in the work, but notwithstanding this there is an enormous volume in hardwood crating stock—that is, stock used for making up individual crates at the time of shipping—that is bought in the form of lumber aside from boxes and box shooks and material entering into their manufacture. In this work some of the harder woods that were formerly found objectionable because of their hardness now find favor because of their strength. So this trade not only includes a heavy volume of the softer hardwoods, such as low-grade poplar, gum and cottonwood, but it also includes a much larger share than many imagine of the harder woods, such as oak, beech, maple and birch.

Death of W. H. Greble

Lumber interests have been much shocked at the demise within less than three weeks of each other of J. L. Sine and W. H. Greble, two of the principal stockholders of the Greble-Sine Lumber Company of Memphis and Chicago. Readers of HARDWOOD RECORD are familiar with the death of the former. The latter was in Detroit looking after matters connected with the winding up of the affairs of the firm when he was stricken with heart disease and died suddenly.

Both of these men were well known to the entire hardwood trade. Both were identified for a number of years with the Three States Lumber Company. About a year ago they organized the Greble-Sine Lumber Company, Mr. Sine having his headquarters in Chicago, while Mr. Greble looked after the southern end of the business. The company had secured the output of several mills in the Memphis territory and was rapidly building up a profitable business. No definite announcement has yet been made as to the plans which the remaining stockholders have in connection with the company.

St. Louis Basket and Box Company Expands

The St. Louis Basket and Box Company, engaged in the manufacture of veneered panels and fruit packages, has again increased its capacity because of growing business. At the mill at South St. Louis this company is erecting a new power plant of modern and powerful equipment. An entirely new type of furnace to handle the variety of fuel used, consisting of coal, dry or wet wood, shavings and sawdust, was planned by the engineers in charge. The furnace has a flat combustion arch suspended from cast iron beams and projects half its length in front of the boilers. The lower tubes of the boilers are covered with tile and a deflecting arch is joined to the rear of the bridge wall. This prevents the heated gases from coming in contact with any cold surface until after combustion has been completed and insures the maximum of heat and makes the furnace practically smokeless. The stack, which is outside of the building, is 5 feet 6 inches in diameter and 125 feet high. The second building contains a modern high-power Corliss engine.

At the mill at North St. Louis, the company has erected three new buildings made necessary by its increased operations and its expansion in the manufacture of the heavier lines of veneered stock such as dresser, desk and tabel tops and all material where a sawed core is used. At this plant a 48 foot Grand Rapids dry-kiln has been installed with seven kiln trucks. In adition, a sawmill house for a new sawmill used in cutting logs and a swing saw used in cutting and equalizing core stock has been installed.

Another new feature is a fireproof building containing the latest type of Linderman glue joiner for dovetailing, glueing and joining lumber for cores. In this building there is also a 42 foot Whitney planer with a capacity of about 35 lineal feet per minute. As the core stock comes from the Linderman machine it immediately passes through the planer and is dressed, and from there passes through the various processes of veneering.

All the new structures of the St. Louis Basket and Box Company are fireproof and modern in every detail. This company has operated for the past thirty years, starting with one small factory, and it has grown to its present dimensions because of the merit of its goods. The new buildings give the company 300,000 square feet of space and the entire plant enables it to produce about 45,000,000 feet of veneer annually.

Annual Meeting of Mutual Liability Company

The Employers' Mutual Liability Insurance Company of Wisconsin, the leading mutual operating under the Wisconsin workmen's compensation law and the organization with which most of the leading lumber and paper manufacturers of the state are affiliated, held its second annual meeting at Wausau recently, with officers, directors and nearly 200 policyholders present.

Reports presented showed that during the twenty and one-half months the company has been transacting business it has paid $89,162.26 under the compensation law and that it now has on hand a balance of $104,196.39. The company now covers the lives of 27,000 employes and has an annual premium income of $137,131.42. A total of 4,060 accidents has been reported, of which twenty terminated in death.

The following officers and directors, made up for the most part from the lists of lumbermen and paper manufacturers have been elected: President, G. F. Steele; vice-presidents, William A. Fricke, W. E. Brown,

W. W. Vincent, W. C. Landon, secretary, H. J. Hagge, treasurer, B. F. Wilson; general adjuster, and inspector, Hoyt A. Winslow; superintendent inspection department, J. C. Youmans, medical director, A. W. Trevitt, general counsel, Neal Brown; general manager, William A. Fricke; executive committee, G. F. Steele, W. C. Landon, M. P. McCullough, Karl Mathie, L. M. Alexander, B. F. Wilson, Neal Brown, William A. Fricke; directors, G. F. Steele, Cornell; Walter Alexander, Wausau; W. W. Vincent, Kenosha; William Fricke, Wausau; W. E. Brown, Rhinelander; L. K. Baker, Odanah; C. C. Yawkey, Wausau; A. Hirschheimer, La Crosse; George E. Foster, Mellen; W. C. Landon, Wausau; L. M. Alexander, Milwaukee; H. J. Hagge, Wausau; M. A. Wertheimer, Kaukauna; M. P. McCullough, Schofield; G. D. Jones, Wausau; Karl Mathie, Mosinee; B. F. Wilson, Wausau; Neal Brown, Wausau.

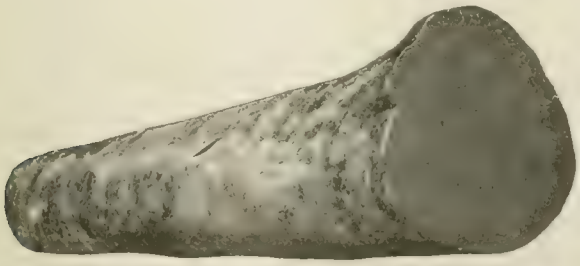
"Lorac" to Prevent Degrading of Logs

There is a considerable loss sustained by every sawmill or veneer plant utilizing logs because of checking, rotting and splitting of logs while they remain in the woods or in piles previous to utilization. In addition, piled lumber depreciates in value considerably through checking and rot if not properly treated. Hence every millman should be particularly interested in any proposition which tends to preserve his saw logs and sawed lumber without its showing any tendency towards splitting, checking or rotting.



CHECKED LOG UNPAINTED

The most effective remedy of this kind is a preparation known as "Lorac" manufactured by George Henke Company, 62 Beekman street, New York City. The actual experience of the hundreds of sawmills and



UNCHECKED LOG PAINTED WITH "LORAC"

veneer men using this product absolutely verifies the contention that the use of this preparation will entirely eliminate checking of either logs or lumber for several months after its application to the exposed ends. "Lorac" is furnished ready for use and may be applied by the most unskilled labor. The process of application merely consisting of painting the ends of logs or lumber as soon after cutting as is practicable. In addition to its preservative feature, "Lorac" is neither inflammable nor corrosive. Furthermore, its low cost, less than one cent per square foot of surface covered, justifies a trial on the part of anyone experiencing checking or degrading of logs or lumber through exposure to the elements

In this connection are shown illustrations of two logs each of which was left exposed to the same weather conditions for several months. The log which shows no splits or check was painted with "Lorac" immediately after being felled, while the checked log was untreated.

The Battle Against the Destructive Moths

Interesting facts were brought out at a conference in February called by the state forester of Massachusetts at Boston for the purpose of arriving at some practical and efficient way of combating the spreading ravages of the brown-tail and gipsy moths. It is certain that New York and other states about Massachusetts will soon be reached by these destructive insects and that unless more effective means are taken they will destroy not only forest trees but shade and ornamental trees over large sections of the state. As shade tree pests these insects can be controlled by spraying and destroying egg clusters; but these methods are used only at considerable expense and must be continued indefinitely. It seems probable that as soon as the parasites and diseases introduced from abroad which work upon and destroy these insects, have become fairly established, they will aid man greatly against future plagues. The gipsy moth problem of the future in the state of New York is a forestry problem, as the insect cannot be fought in the forest by spraying, but must be controlled and eventually eliminated by proper methods of forest management. Certain trees such as oak, willow and birch are apparently more favorable and often seem necessary for the development of the caterpillars of the moths. Methods of forest management can be used such as removing these trees from the forest and thus destroying the favorite food of the pests. With this method of proper forest management must go strict quarantine against lumber, cordwood and nursery stock shipped in from infested territories. Some effort has been made to establish a dead line to prevent further spread of the insect. A stand of timber consisting largely of white pine and other evergreens is selected and all hardwoods or broadleaf growth removed.

A Book on Economic Woods

The publishing house of John Wiley & Sons, New York, has issued a valuable book from the pen of Samuel J. Record of Yale University, under the title "Identification of the Economic Woods of the United States." It includes a discussion of the structural and physical properties of wood. Readers of HARDWOOD RECORD are well acquainted with Mr. Record's excellent work. The book is not large, but a remarkable quantity of information is crowded into its 120 pages. It deals exclusively with the structure and other properties of wood, and does not take up tree growing. The busy, practical man will find in it the answers to many questions which come up from time to time. Some of the matters treated are the taste, odor, luster, and color of wood, and the reasons why one wood differs from another in this respect. Shrinkage, warping, and checking are discussed and the causes which produce them are pointed out. Other properties considered are resonance or the sounding qualities of woods when struck; the ability of woods to absorb water; their penetrability by preservative mixtures; the amount of moisture in woods at various stages of seasoning; the weight, density, grain, and growth rings; and the origin, qualities, and properties of heartwood and sapwood.

The descriptions of wood structure are particularly precise. This is a technical subject and must of necessity be treated in scientific language; but explanations are clear, and the text is illustrated by pictures both entertaining and instructive.

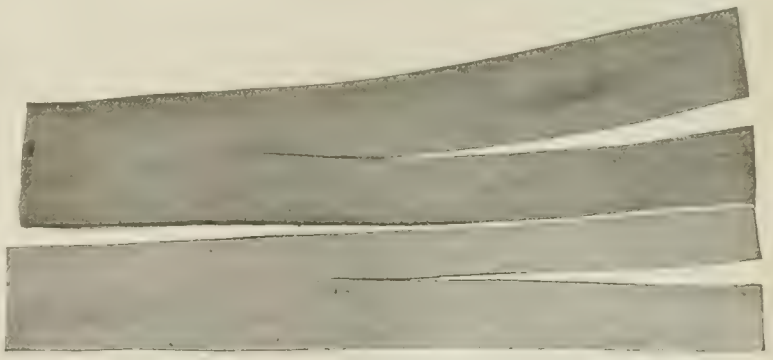
The book contains a key to the identification of the important economic woods of the United States. This key is valuable to the wood user because it enables him to identify nearly any sample of timber that comes to his notice. Misunderstanding and uncertainties constantly arise as to what species or genus a certain wood is, and even men who have had long experience in handling woods are often in doubt.

Galax Gatherers' Efficient Forest Fire Patrol

An interesting example is found among the mountains of North Carolina of the effect of local sentiment in keeping down forest fires. It is also an example of how local sentiment may be influenced by a very small thing.

The government recently purchased a tract of 11,150 acres of timber and cut-over land on the east slope of Mt. Mitchell, on the head of South Toe river, which is one of the fountain streams of the Tennessee river. A certain part of the tract was found to have suffered very little from forest fires, and it was there that the good results of local sentiment and effort were discovered. It was evident that some influence had been active in keeping fires out of that part of the tract.

It was discovered that for some years a local industry had been carried on in the mountain fastnesses by the people who live in the vicinity. A beautiful and rare plant, known as galax (*galax aphylla*), grows there. Its round, shining leaves, and its raceme of white flowers



BOARDS SPLIT IN SEASONING; NO PRESERVATIVE USED

on a central stalk, are dainty and attractive. Only one species of this beautiful evergreen plant is known to exist in America, and it grows along the mountains from Viriginia to Georgia.

The settlers about Mt. Mitchell discovered that florists in northern cities would pay good prices for the galax plants, and a local business of gathering and shipping them developed. The gathering was done chiefly by women and children, and local merchants shipped the plants

and collected the money. It is only a small business, but it is interesting. The summer outings of the gatherers in the high mountain forests are pleasant and healthful, and the profits are satisfactory.

Naturally those who are interested in gathering galax are likewise interested in seeing that no fires break out in that locality, because fire ruins the galax beds. The result is that the tiny plant has been instrumental in protecting the forests by creating a sentiment opposed to fires. It shows how a very small thing may work for good. It would have taken a great deal of preaching on the benefits of forestry to convince the North Carolina mountaineers that there is anything in it for them; but a concrete example converted them.

Synthetic Tannin

Synthetic camphor, made principally of turpentine, has been on the market for some years, and now synthetic tannin has appeared. It is an English discovery, made by Dr. Edmund Stiasny, assistant professor in the leather laboratories of Leeds, England. The new tannin has been named neradol, and is made of tar and certain other ingredients. The tar is passed through distillation processes and some of the products are employed in making the tannin, but what the exact process is has not been stated, except that "the synthesis is carried out by sulphonating cresylic acid and combining it then with formaldehyde." The price of neradol is $97 a long ton. It is said to be thirty per cent pure tannin. Leather makers do not anticipate that it will immediately revolutionize the tanning business, though it gives good results with certain kinds of leather. It is not wholly satisfactory with other kinds. There is little doubt that a long time will elapse before hemlock tanbark and tanning extract made of chestnut will disappear from the markets.

Fire as a Tool

Civilized man occasionally goes back to the savage for lessons in economy and efficiency. Fire has always been one of the most useful tools that the savage could use. The American Indian hollowed tree trunks by burning them, and made boats and canoes for navigating rivers and lakes. He had no edged tools better than stone, bone or shell, and they were practically useless in working wood. Necessity compelled him to make use of fire where it would serve his purpose. For hundreds of years the white man in this country has felt pity rather than contempt for the poor Indian who was once forced to resort to the slow process of fire in hollowing tree trunks.

Probably, after all, the red man was not a subject for pity. At any rate, a recent report made by James T. Jardine, a grazing inspector in the Department of Agriculture, places the Indian's work in a new light, without so much as mentioning the Indian or giving him any credit for ideas or methods.

One of Mr. Jardine's duties is to look after the government's vast land holdings in the West, particularly such lands as are leased to stockmen for pasturage. He recently discussed the subject of watering places for stock, and described the troughs provided, where thousands of sheep repair daily to drink. Troughs used at the watering places are hollowed from the trunks of trees. The cost is a considerable item where large numbers of such troughs have to be made, particularly when labor is scarce and expensive, as it is in some of the remote Western mountain regions.

Mr. Jardine experimented with trough making, with ax and adz, and also with the old fire method as practiced by Indians from time immemorial. The remarkable thing is that the Indian method has been found the fastest and most economical, except when conditions for burning are unfavorable.

The method is simple. Long logs are selected for troughs, and along their upper sides, nearly from end to end, small fires are kindled. They are kept going on several logs at once, and one man can attend to them. He sees to it that the fire does not blaze up and consume the logs, but that it is confined to the channel along the top, gradually deepening it until it becomes of the desired width and depth. The trough is then done, although some finishing touches may be added with an ax or adz.

That was the identical method pursued hundreds of years ago by Indians in making their dugout canoes.

Norwegian Wood Flour and Sawdust

Wood flour, an important raw material in the manufacture of linoleum and dynamite and which also has many other uses, has never been manufactured in the United States on a large scale. For some reason its production in this country never has met with much success, the principal reason probably being that those who have engaged in this line have not succeeded in getting the proper grinding stones and turning out a flour sufficiently fine and at a price to meet Norwegian competition. And the fact that this competition cannot be met is in the face of a stiff ocean freight rate, insurance and a certification of the shipment in accordance with the custom requirements.

Norwegian wood flour is sold by the native or short ton weighing 1,000 kilos, equivalent to 2,204.6 pounds and by the English or long ton weighing 1,016 kilos, or 2,239.9 pounds. The price per English or long ton in November at Christiania was from 40 to 50 crowns, or $10.72 to $13.40. The price to the consumer at which this flour is laid down in New York is considerably higher. The freight rate is approximately $5.15 per ton, with an additional $1 a ton for insurance. Added to this is the $2.50 paid by the seller and charged to the buyer for the certification of the shipment. Assuming a price of $12.06 a ton, the average between the quoted price of $10.72 and the higher price of $13.40, and adding the freight, insurance and certification charge, a ton of Norwegian wood flour in New York costs $20.71. Since practically all of the material is utilized outside of New York an additional freight charge is applicable, so that the material substantially costs the buyer $22 a ton. It might be supposed that American producers could come near meeting these figures, but they have not so far.

The Norwegians also get a good price for their sawdust, considerable of which finds its way into the United States for use in linoleum plants in the course of a year. For instance in Christiania, Norway, sawdust is sold by measure at a price of 30 öre (8.04 cents) per hectolier (2.84 bushels), a hectolier weighing from 13 to 15 kilos (28.66 to 33.07 pounds) depending of course upon the kind of lumber from which the sawdust is the by-product.

African Mahogany Popular

The sales of African mahogany in the Liverpool market for 1912 were highly satisfactory. The receipts were larger than for any preceding year, except 1908, yet so strong and active was the demand that shipments met with prompt sale as they arrived.

There was an excellent attendance of buyers at the auction sales, who keenly competed for all grades. As a result a high level of prices was established, the late sales of the year seeing prices at their highest, which is worthy of note, as it was during the last few months that the import was at its heaviest. These enhanced values applied not only to logs of the best quality, but also for lower grades, the minimum wood, which was composed chiefly of logs in very defective and faulty condition, realizing from six to seven cents per foot, while figured logs ranged up to $2.55 per foot.

Present indications point to a continuance of the active inquiry that now exists in the Liverpool market for African mahogany, and also that current rates will be well maintained.

Planting Norway Poplar for Pulp

The Delaware and Hudson Railroad Company has recently purchased 300,000 Norway poplar cuttings for planting on burnt-over lands with the idea of growing pulp-wood. The cuttings used will be fourteen inches long and will be spaced 6x6 feet on various kinds of land. While the work is largely experimental, the company believes it can harvest pulp material every fifteen years.

The Norway poplar is much like the Carolina poplar and is considered a horticultural variety of the common cottonwood. Attention was first called to it by Professor Green of the Minneapolis Agricultural College, and a number of plantations of it have been made in different parts of the country. It is claimed that the tree is hardier, grows more rapidly, and has less taper than the Carolina poplar. On one plantation in Nebraska it is said that fence posts were cut from four-year-old trees that measured fifteen inches in circumference three feet from the ground.

Tie Plugs

Whenever a spike is pulled out of a crosstie the hole that is left affords excellent opportunity for the entrance of water carrying spore and disease germs to the interior. To overcome this the holes are now commonly filled with wooden plugs. These plugs are used by the million and are for the most part sawed by special machines from slabs and scraps from the mills and shops. Some railroads make some of their own plugs in the shops or employ the spare time of the section men in splitting them out of old ties. The common size is about four and a half inches long, five-eighths of an inch square in cross section and with one end wedge-shaped like a spike. For untreated ties white oak or other durable wood is preferred for plugs. Any wood can be used where the ties are treated since the plugs are placed in gunny sacks and impregnated with the preservative along with the ties.

Fuel Values of Different Woods

Occasionally theory runs counter to practice and suffers in consequence. A good example of this is furnished by certain tests of the fuel value of woods, recently made by H. S. Betts, an engineer in the government's forest products laboratory at Madison, Wis.

The theory has long been held and has seldom been questioned that the fuel values of dry woods are in direct proportion to the weights of the woods, after certain allowances have been made for ashes and resins. That was the theory on which Sargent worked nearly thirty years ago in computing his tables of the fuel values of 300 American woods. He reduced the sample to an oven-dry condition, weighed it accurately, then burned it and weighed the ashes. Using these weights as factors he calculated the value of the wood as fuel. His tables are the most complete that have ever been made of the fuel values of American woods, and they have generally been accepted since they were first published by the government in volume 9 of the tenth census, in 1884.

Mr. Betts does not repudiate the theory followed by Sargent, but accepts it for what it is worth. He qualifies his acceptance, however, by saying that "thoroughly liquefied tissue has the same heating value for all species of trees, but the varying forms of tissue found in the different species, the addition of resin and other materials, and the water present in varying amounts, cause different heating values. All these factors should be taken into consideration."

The tests were made by a process entirely different from that used in compiling Sargent's tables. Instead of weighing the wood and the ashes remaining when the wood was burned, and completing the work with a lead pencil, Betts burned the samples used in his tests in such a way that the actual heat given off could be accurately measured. The resulting figures do not show how much heat ought to be developed according to theory, but how much was developed, used, and measured. The difference in the two methods is a good example of the difference between theory and practice. The old theory is not altogether discredited, but the practical tests show that theory sometimes needs a good deal of doctoring before it fits actual conditions.

The result of Betts' experiments appears to give a pretty severe jolt to the theory that the heat values of woods are approximately proportioned to their weights. An actual divergence, in one case as great as eighty per cent, was found between Sargent's theoretical figures and the figures from the actual tests made. The relative fuel value of certain of the species tested was completely and very decidedly reversed as compared to Sargent's estimates.

Accident Preventing Hints

The success of the United States Steel Corporation has been dependent not altogether on its vast backing, but also on the high degree of efficiency and modernness of its methods and equipment.

As an instance of the up-to-date methods followed by this vast corporation it has just compiled a list of hints for the prevention of accidents in industrial plants. They are as follows:

Do not go into dangerous places until you are absolutely sure they are safeguarded.

Remember, it is better to cause a delay than an accident.

Small neglects are apt to cause serious accidents.

The failure to obey safety rules endangers the life of yourself or fellow-workman.

Lookout for the other man, you might hurt him.

Do not work with unsafe tools. Tell your foreman.

Every injury, no matter how slight, should receive proper medical attention.

Safety devices are of little value unless maintained and used as they are intended.

Careful men are usually efficient: careless men are not.

Replace all guards and safety devices when through making repairs, and before machinery is started.

Don't fool with electricity. It is dangerous.

A guard is placed on a machine solely for your protection. Don't operate a machine without a guard in place.

Stop machine before oiling, wiping, or repairing it, and don't try to operate a machine you do not understand.

Every employe whose duty requires him to work with appliances of any kind, must carefully examine same and report any defects.

The exercise of care to prevent accidents is a duty which you owe to yourself and your fellow-workmen.

Beware of blood poisoning. A wire scratch will cause it sometimes.

Always bend nails down before throwing boards aside. Many serious injuries result in stepping on protruding nails.

Skis Made in Summer

The user of skis to skim over deep snows usually does not give the subject much thought in summer; but his thoughts become very active when winter snow in the North woods begins to accumulate. The maker of skis, however, is thinking of the matter in the summer. That is the season when he is busiest.

Many of the skis used in this country are made in Norway. The product of that country is sold from Maine to Oregon. The ski is not made in factories, as a rule, but the Norwegians make them in their homes. A company in that country makes a business of buying the skis from individual makers, and exporting them to the various countries that buy them.

The best skis are made of green ash, with oak next popular, while the cheap grades are made of fir and pine. They vary in length, the standard rule calling for skis as long as the distance from the ground to the height the wearer can reach with extended arm and finger tips. Skis of oak or ash, for women's use, usually cost $3.22 to $4.82; for men's use, $3.75 to $6.97. Cheap skis, made of fir and pine, cost $1.34 to $2.14. These prices are those asked by the carpenters and are exclusive of the "bindings," which cost $1.34 to $1.61 per pair. The bindings now in use are patented, and are made by local harness makers and sporting goods factories. Pigskin of good quality is used, as the straps must be very strong and withstand alternate wetting and drying.

The ski must be made of carefully selected wood, free from all knots and with the grain running the long way. They are 3½ to 4 inches in width and about ⅜ of an inch thick, with a keel or ridge running the full length on the under surface to prevent side slipping. The front curve is obtained in a very simple manner, by soaking the end of the ski in hot water, until soft, and then, by putting a block of wood under it, it is turned up and held in a natural curve until dry. The skis are varnished but never painted. The lumber is bought in Norway and selected with great care.

For skiing poles, ash, oak and bamboo are used, the latter being imported. The poles sell for 67 cents to $1.47. Near the point a ring of wood encircles the pole, to which it is attached by numerous strings of leather. This is to keep the pole from sinking into the snow more than six or eight inches. The poles are made by the carpenters that make skis.

Lately Germany has commenced to manufacture skis by machinery and Norwegian exports to that country have therefore slightly decreased. On the other hand, exports to the United States have increased during the past year or so, although some skis are now made at St. Paul, Duluth and Minneapolis.

Hardwood News Notes

MISCELLANEOUS

The Dixie Spoke Company, Newton, Miss., has gone out of business.

The Henry Motor Car Company of Muskegon, Mich., is out of business.

L. J. Tripp of the Sidnaw Handle Company, Sidnaw, Mich., recently died.

The Newark Gear Wood Company of Newark, O., has gone out of business.

Clyde R. Klumph of Cleveland, O., has been succeeded by Klumph & Enoch Company.

The Choctowatchee Hardwood Lumber Company has discontinued business at Bellwood, Ala.

The Harlan Hardwood Lumber Company at Middletown, O., has removed to Hamilton, O.

A veneering mill is to be added to the plant of the Paris Box Manufacturing Company, Paris, Tex.

The Standard Handle Company has been incorporated at Sandusky, O. with a capital stock of $30,000.

The Meteor Motor Car Company has been incorporated at Indianapolis with a capital stock of $150,000.

H. Rosenwach & Son has been incorporated for $5,000 to manufacture wooden tanks at New York City.

The Ann Arbor Organ Company of Ann Arbor, Mich., has been succeeded by the Ann Arbor Piano Company.

C. A. Miller & Co., Marietta, O., have gone out of business because of severe losses sustained during the recent flood.

The City Desk Company, Grand Rapids, Mich., has filed articles of incorporation, increasing its capitalization from $110,000 to $120,000.

The Louisville Chair Company is the style of a new corporation at Louisville Ky. This concern has $12,000 capital.

N. Passman & Son is the style of a new woodworking incorporation at New York City. This company has a capital stock of $5,000.

C. L. Goodwin & Co. has been organized at Worcester, Mass., to engage in a woodworking business. This company has $3,000 capital.

The Phoenix Chair Company of Sheboygan, Wis., will shortly begin the erection of a five-story addition to its factory to be 50x100 feet.

The Labaugh & Armstrong Wood Turning Company is the style of a new organization at New York City with a capital stock of $10,000.

The Carroll Lumber Company has been formed at Boston, Mass., by Archie E. Noble, Carl H. Carroll, Harriet S. Brigham. The capital stock is $10,000.

Fred J. Roettger, Thomas J. Moore and Everitt G. Roettger have incorporated the Roettger-Moore Lumber Company at Lexington, Ky., the capital stock being $10,000.

The Malvern Land Company has been organized at Kansas City, Mo., with an authorized capital of $10,000. The incorporators are: John Kelley, J. M. Kelley and A. B. Kelley.

It is stated that Harris & Cole Brothers have sold their mill at Sulligent, Ala., to the Kentucky Lumber Company of Cincinnati, O., and that the mill is being enlarged to cut 100,000 feet a day.

The Pacific Hardwood Manufacturing Company has been incorporated at Los Angeles, Cal., with a capital stock of $10,000. The directors are: Harry I. Thompson, N. H. Cedarquist, Harry P. McKay.

The Pearl City Veneer Company of Jamestown, N. Y., recently purchased the plant of the old Falconer Veneer Company of that place, and in addition is making extensive improvements on its old plant.

It is announced that the R. E. Wood Lumber Company of Baltimore, Md., has begun the erection of a six-foot band mill on a tract of timber recently purchased by the company, five miles below Bristol, Tenn.

The Southern California Hardwood & Manufacturing Company has been formed at Los Angeles, Cal., with a capital stock of $1,500,000, the directors being: R. H. Raphael, E. M. Champion, Dave Woodhead, Louis Machol, Sheldon Morris, William Hilker, Louis N. Trappe, H. C. Treff, E. M. Burnham and Mark G. Turnbull.

The New Albany Veneer Company of New Albany, Ind., has completed extensive improvements at its plant, giving it 20,000 feet additional floor space. A Sherwin-Williams varnish dryer has been installed 42x30 feet in dimensions. In addition a complete glue laboratory has been added to the plant. Additional warehouse space will be provided in the near future by the construction of another warehouse 150x60 feet. An additional Linderman glue jointer and a Merritt balance plate dryer will shortly be installed. The capital stock of the company has been increased to $20,000.

CHICAGO

James B. Wall of the Buffalo Hardwood Lumber Company is making quite a record as commissioner of police of Buffalo, N. Y., according to the annual report of that body. HARDWOOD RECORD acknowledges receipt of a very handsomely bound volume of the report sent with the compliments of Mr. Wall.

On Thursday, May 29, George W. Hotchkiss, widely-known as secretary emeritus of the old Lumbermen's Association of Chicago, gave a noon-day talk on "The Early Days of the Lumber Trade in Chicago." This is the third of a series of noonday talks, which have proved very popular with the club members.

HARDWOOD RECORD acknowledges receipt of a bound volume of the report of the proceedings of the twenty-first annual meeting of the National Wholesale Lumber Dealers' Association held at Atlantic City, N. J., Mar. 6 and 7.

The Argo-Summit Lumber Company has been incorporated at Chicago with a capital stock of $15,000.

Arthur J. King, president of the King Piano Company, Chicago, died recently.

The Mueller & Haines Piano Player Company has been incorporated at Chicago, Ill., with an authorized capital of $25,000.

The Wicks Pipe Organ Company, Highland, Ill., has increased its capital stock to $60,000.

Among the prominent visitors attending the convention of the National Hardwood Lumber Association at Chicago last week, who called at HARDWOOD RECORD offices were: Walter Bass, manager of the Memphis Veneer and Lumber Company, Memphis, Tenn.; George Henke of New York City, manufacturer of lorac; J. C. Turner, prominent cypress manufacturer of New York City; and Nels Dueholm of Oshkosh, Wis., sales manager of the Scott & Howe Lumber Company and the Medford Lumber Company.

Four floors of Marshall Field & Co.'s new skyscraper annex, now being erected in Chicago, are to be finished in American black walnut. The cost of the lumber and veneers employed for this purpose approximates $40,000. The contract for this material has been placed with C. L. Willey of Chicago. This is the first time in years that such an important piece of finishing work has been executed in this wood. The black walnut paneling to be employed in veneers is from remarkably handsome specimens of this wood, being highly figured from end to end, and is one of the most beautiful examples of black walnut that has been found in years. This timber grew in Oklahoma. The other floors of the building are to be finished in mahogany.

NEW YORK

Much to the surprise of the many timber and other interests of the state Governor Sulzer has vetoed the conservation bill passed by the last session of the legislature. The bill was considered the best of its kind thus far drawn and those interested chiefly in it were confident that the governor would sign it.

The Perth Amboy Lumber Company is a new concern in the trade of this district. The company has bought the yard formerly conducted at Perth Amboy by Messrs. Hazard, Hillman & Harris. H. S. Chittick, for many years with James D. Leary of Brooklyn, is the active head of the new concern.

The local branch of Hoo-Hoo is in line for some activity of the real sort this coming season. Under the leadership of E. H. Lewis, popular lumberman who is vicegerent for the district, the "cats" are being canvassed in the interest of a concatenation which is scheduled to be held June 27. The plan was launched at a meeting of the active ones in the organization in the district at a conference on May 23. The ceremonies will be held at Riesenweber's popular Coney Island restaurant in the afternoon and on the roof in the evening. Mr. Lewis has assurances that Supreme Scrivenoter W. M. Stevenson of St. Louis, will be present at this concat which is the first to be held in New York in several years.

George M. Stevens, Jr. of Stevens-Eaton Company, has returned from a trip to the Pacific coast in the interest of business. The results of his trip were gratifying.

E. H. Barton, hardwood lumber importer of Liverpool, sailed for home after an extended trip among the mills of the southern states.

W. D. Young, prominent hardwood manufacturer of Bay City, was a visitor in New York during the past fortnight.

Desmond N. Meighen, formerly local representative of W. C. Edwards & Co., of Ottawa, Ont., has gone to take up the enlarged duties of assistant sales manager at headquarters. He has been succeeded in the Metropolitan district by W. G. Barron who had been with the company in a selling capacity for a number of years. Mr. Meighen came to New York a number of years ago and has many good friends among the trade here.

BUFFALO

The main event of interest in lumber exchange and hardwood circles this month is the first outing for 1913, which will be held on June 17, weather permitting, at the country clubhouse of the Automobile Club at Clarence. The meeting place for those who go is the junction of Swan, Erie and Pearl streets and the time is 1:15 P. M. sharp. In case of rain the outing will be held on the day following. It is expected to "go some," in the words of the committee, and the chief attraction will be a baseball game, in which the hardwood members will be counted on to show their usual skill and knowledge of the sport by defeating the white pine representatives. The committee has worked hard to get up a good program this year and hopes to see a large turnout. W. P. Betts is chairman of the committee and other members are E. J. Sturm, J. B. Wall, E. T. Sullivan, Hugh Stewart, Peter McNeil and John F. Knox.

Secretary John S. Tyler's report to the Buffalo Lumber Exchange shows that hardwood stocks in yards of Buffalo dealers on Dec. 31 last were 64,038,900 feet, an increase of 3,771,500 feet for the year. The hardwood receipts by rail for the year were 70,908,000 feet, showing an increase of 29,748,000 feet. Shipments by rail were 79,494,600 feet, an increase of 34,596,000 feet. Hardwood business here is showing a very good increase.

B. E. Darling has been away much of the time for the past two months and has secured quite a stock of southern hardwoods, especially oak, for Blakeslee, Perrin & Darling.

George B. Miller of Miller, Sturm & Miller has been spending a short time in the Adirondacks, getting a little respite from the cares of the hardwood business.

O. E. Yeager recently spent a short time at his old home in Pennsylvania. He was also in Canada for a few days last month, where he did some fishing and reports good success.

I. N. Stewart is back from a business and recreation trip to Canada. He states that his firm is getting quite a number of orders for oak and ash and also a few for cherry.

F. M. Sullivan is planning to take a western trip early this month to look over hardwood stocks. His yard will receive a good deal of brown ash by lake later in the season.

William L. Sykes, president of the Emporium Lumber Company, recently accompanied his daughter to New York before the latter sailed for Europe. Mr. Sykes expects eventually to reside in Utica, now the company's headquarters.

James A. White, president of the National Lumber Company, has been in Michigan a good deal lately looking after the railroad operations of the W. H. White Company, which are being carried on extensively.

Anthony Miller reports a fair trade in hardwoods during the past month, with quite a good deal of strength developing in plain oak, of which the yard is carrying a fair supply.

A. W. Kreinheder was chairman of the house committee at the recent opening of the automobile clubhouse. He states that the crowd was fair considering the weather and a good many lumbermen were in the number present.

PHILADELPHIA

Daniel B. Curll says his mills are rushed to full capacity getting out stuff. Orders are coming in liberally and prices are holding firm.

James H. Campbell of Currie & Campbell says hardwood trading is strengthening and prices are well sustained. Their mill at Jacksonville, N. C., is pushed to the limit filling orders and the general condition is satisfactory.

Horace A. Reeves Jr. states that although there is ample room for improvement the lumber situation continues satisfactory. A fair amount of business is coming in, considering the very much prolonged tariff legislation and other obstacles to contend with at this time.

Emil Guenther of the Guenther Lumber Company reports a little slowing up in a few lines and some avowed concessions, but he has no reason to complain of the volume of trading during the month. Mr. Guenther recently purchased a tract of 4,000 acres of timber in North Carolina, running principally in gum. He has secured cruisers and surveyors and the manufacturing will be got under way as rapidly as possible.

The Jamaica Hardwood Company, Philadelphia, was incorporated under Delaware laws, May 29, with a capital of $30,000.

William P. Shearer of Samuel H. Shearer & Son says trading is somewhat spasmodic in character, but there are no signs visible of a weakening in the near future. Their planing mill at Atkinson, N. C., is nearly ready to get out goods.

Norman A. Perry, manager Robert C. Lippincott, reports a diminished zest in business at this time, but predicts a brightening when the perplexing tariff question is settled.

William H. Fritz of William H. Fritz & Co. says business is running evenly, with no disturbing threat of an imminent weakening.

J. Gibson McIlvain, Jr. of J. Gibson McIlvain & Co., has returned from an extended honeymoon trip to the north of Africa, and is busy again at his desk. He says there is considerable business coming in and prices hold stiff. He says so far he can not see any substantial grounds for the prognostications of a break in values, especially in the present scarcity of standard stock.

Charles K. Parry of Charles K. Parry & Co. sole sales agents of the Carolina Spruce Company, Pensacola, N. C., says orders are coming in so fast their mill has all it can do to fill them and the outlook is favorable.

PITTSBURGH

The Willson Brothers Lumber Company of Pittsburgh has bought the well known Kingwood tract of lumber consisting of about 2,000 acres

near Preston, W. Va. It is estimated that the tract will cut 15,000,000 feet and it is understood that an operation will be started in the near future. President J. L. Kendall made a trip of inspection lately over the company's property near Ice's Ferry, Pa. The company will start work at once cutting out a large amount of big timber for railroad concerns.

Charles E. Ruhl, Ernest Watson and others of Wilmont, Pa., have bought the Geyer tract of about 1,300 acres of timber near Franklin county, Pennsylvania. A big sawmill will be built near Shippensburg, Pa., and it is expected that the lumber, some eight million feet in all, will be shipped from that place.

The Germain Company reports things slowing down a little, especially in the coastwise trade. Demand there has been very light the past two weeks. C. W. Cantrell, manager of the Philadelphia office, was a recent visitor in Pittsburgh.

The Aberdeen Lumber Company has been very busy the past month getting out and unloading at Joppa, Ill., three barges of gum and cottonwood. President J. N. Woolett is going after business harder than ever this month and has added J. F. Utley, a well-known machinery man of this city, to his force of salesmen.

The Acorn Lumber Company is doing a fine business in hardwood this year and President H. F. Dumhoff is not losing any sleep worrying over the situation. His trade with the manufacturing and industrial concerns has been strictly first-class.

The Duquesne Lumber Company is now having cut for it by the Pittsburgh Lumber Company 100,000 feet a day at the big operation at Braemar, Tenn. A large part of this is hardwood. On a recent trip through the eastern markets, Sales Manager G. C. Adams disposed of a big lot of hardwood at a nice figure.

The Pittsburgh Wholesale Lumber Dealers' Association is now holding its weekly luncheons on Tuesdays at the Duquesne Club. This association, with the Pittsburgh retailers, will enjoy the regular annual picnic at Elwyn Park on the Charleroi car line on June 21.

BOSTON

The Westerly Lumber Company, Westerly, R. I., has been incorporated with a capital stock of $50,000. The incorporators are Charles P. Eccleston, Frank Hill and Joseph Lenihan.

George H. Snow, a well known lumber salesman connected with the Ely Lumber Company, died at his home in Holyoke, Mass., late in May, at the age of seventy years. He has been a salesman for this company for the past twenty years.

C. L. Goodwin & Co., Inc., Worcester, Mass., has been organized with a capital stock of $3,000 for the purpose of carrying on a wood-working business. The incorporators are Alfred S. Goodwin, Elizabeth Goodwin and Elliot C. Goodwin.

The preliminary certificate of dissolution of the Stiles Lumber Company of New Haven, Conn., has been filed with the secretary of state of Connecticut.

The Rockland Planing Mill Company, Rockland, Me., has recently been organized by Everett Spear, Edwin H. Maxcy and Fred K. Clark, all of Rockland. The new company has a capital stock of $10,000.

The woodworking mill of H. E. Burill, Contoocook, N. H., has been damaged by fire. The loss to building, machinery and stock is estimated at about $7,000.

A large tract of hardwood timberland in Bennington County, Vermont, has been sold by the owner, Livingston Cushing, of Boston, to the New England Hardwood Company, whose headquarters are in Wilmington, Vt. The sale provides that the new owner shall have twenty-five years in which to cut off the lumber. A year or so ago this company purchased another large hardwood timber acreage from the Deerfield Lumber Company and the Somerset Land Company. The latter properties are close by the company's latest purchase.

BALTIMORE

The plant of the Charles J. F. Steiner Mantel Company at Monument and Eleventh streets, Highlandtown, in the eastern suburbs, was sold at public auction on May 22 to Joseph B. Dunn & Son for $25,000. The company went into the hands of receivers some months ago. The purchasers have been in the business of manufacturing marble and slate mantels for years and will add the manufacture of wooden mantels to their activities.

Hugh L. Leary of C. Leary & Co., the well-known London lumber and timber firm, stopped in Baltimore two weeks ago for three days on his way to New York to take the steamer for home and was entertained here by Richard P. Baer & Co., and John L. Alcock & Co. Mr. Leary has been in the United States since last December, looking after various business matters for his firm. He also undertook to interest American dealers in a species of white pine manufactured in Siberia. Mr. Leary showed a sample of the wood, which looks somewhat like California white pine and has a fine grain. He conferred among others with George F. M. Hauck of Thos. J. Shryock & Co., on the subject of the Siberian wood.

L. A. Poehlman & Sons, 942 Frederick avenue, yardmen, have installed a most interesting exhibit of doors and other millwork at their place. Doors are shown in many styles and of all prices, while different kinds of hardwood finish in construction work are also to be seen, the collection making a most instructive display.

Mrs. Rosella Berger and Miss Bertie Berger, wife and daughter of William S. Berger, a retired lumber operator of West Virginia, who now lives in Cumberland, Md., were killed recently when their auto skidded at the Narrows, just west of Cumberland, and ran into a telegraph pole. Mr. Berger and another daughter were thrown out of the vehicle and injured.

The Baltimore lumber trade has lost another old member by the death of George N. C. Sack, founder of the firm of George Sack & Sons, lumber dealers at Lauraville, in the northeastern suburbs, who passed away on May 24. Mr. Sack was seventy-nine years old and came to the United States in 1854, working for a time as a cabinet maker and then drifting into the lumber trade, in which he was very successful. For some years he had not been active.

COLUMBUS

The Whitacre Lumber Company, which formerly had offices at 451 West Broad street, has moved its offices to rooms 521 and 522 Columbus Savings and Trust building. The company's wholesale yard on McDowell street is also being closed out. The former offices of the company are now occupied by the Doddington Company, lumber dealer and mill worker.

The Mittenford Box Company of Ironton, O., has closed a deal for the purchase of the buildings and grounds formerly occupied by the Disk Plow Company on South Third street. The company will remodel the plant and install new machinery for the manufacture of boxes.

W. B. Sissons, sales manager of the Sowers-Leach Lumber Company, reports a fair demand for all hardwoods with prices well maintained in every particular.

F. Everson Powell of the Powell Lumber Company says trade is a little quiet, although no great weakness in hardwoods has appeared as yet.

At McConnellsville and other towns in the Muskingum valley, "building bees" have become the rule. This is done to replace the dwellings destroyed by the recent flood. The Red Cross furnishes the lumber, and neighbors for miles around come in and erect the dwelling.

Mrs. Mary A. Bachtel, aged seventy-eight, mother of O. H. Bachtel and L. M. Bachtel of the Bachtel Lumber Company, Canton, O., died recently at her late residence, 304 Blaine street, from a complication of diseases.

The business men of Springfield, O. have raised a fund of $100,000 to be used in attracting manufacturing establishments to that city. The money will be expended under the auspices of the Industrial Bureau which was instrumental in raising the amount.

Committees have been formed by the Columbus Builders' and Traders' Exchange and the Columbus Society of Architects for the preparation of forms of specifications and methods of awarding contracts in the future. A number of other questions of interest to both organizations will be taken up.

The N. A. Curtis Manufacturing Company of Columbus has been incorporated with a capital stock of $15,000 for the purpose of erecting a plant for the manufacture of show cases, carpet sweepers and like articles. The incorporators are N. A. Curtis, M. E. Swanson, C. R. Milliken, E. W. Martendale and L. M. Seiller.

Reports from the offices of architects and contractors of this city show that residence building in Columbus has entered upon a season of record activity. Contracts have been awarded for a large number of residences of all kinds, but there is yet much work to award. Apartment houses and flat buildings are becoming more popular than ever.

John R. Gobey of John R. Gobey & Co., says there is a good demand for hardwoods all along the line. Prices have not shown any weakness and firmness is the rule.

W. W. Reilley of the firm of W. W. Reilley & Bro., Buffalo, N. Y., was a visitor among Columbus wholesalers recently.

D. L. Webb of Portsmouth, O., is considering the question of erecting a modern planing mill. His concern recently sold its plant to the Excelsior Shoe Company and in turn took over the plant of the Williams Lumber Company which has proven inadequate to the needs of the Webb Company. A site of five acres has been optioned and the deal will probably be closed soon.

The Celina Furniture Company of Celina, O., has been incorporated with a capital stock of $10,000 by Alfred Querinjean and others.

The Schweickart Lumber Company at Ironton, O., has been incorporated with a capital of $15,000 to deal in lumber. The incorporators are L. W. Ault, W. L. Schweickart, Edward Kurtz, Millard Adams, John Hortel, J. L. Brothers and C. W. Disterdick.

F. B. Pryor of the W. M. Ritter Lumber Company reports a good steady demand for all grades and varieties of hardwoods. Prices are ruling firm and there is no inclination to weaken in any quarter. Dry stocks are not very large. Shipments are coming out fairly promptly. Mr. Pryor has just returned from a business trip to Toronto and other Canadian points.

TOLEDO

Manager Roberts of the Big Four Hardwood Company is spending a few days in New York City. This concern reports business good especially in its piano case industry.

The Toledo Bending Company reports all the business it can attend to. Its plant is running full time and full capacity. The outlook is very good.

The Booth Column Company is working fifty-nine hours a week trying to keep up with the orders which have practically swamped the concern recently. There is a good local demand and a more than normal call from all sections of the country.

Business is good with the J. M. Skinner Bending Company which has all the orders it can take care of. Prices are good and the concern is well fitted out with stocks.

The Toledo Carriage Woodwork Company reports a good line of orders and prospects for a busy season. The factory is operating at full capacity.

The Keasey Pulley Company has been reorganized and the plant is operating with a full force of men. This concern was shut down for a year and a half. The new company purchased the patterns, castings, machinery and tools of the old concern. About 100 men are employed.

INDIANAPOLIS

The Montgomery Hardwood Lumber Company of Crawfordsville has been dissolved.

Lightning caused about $40,000 loss by fire at the mill and yard of the New Union Lumber Company at Jasonville on May 22.

With $25,000 capital the Union Lumber Company has been organized and incorporated here to conduct a general lumber business. Those interested in the company are Franklin Greenwood, G. H. Howenstein and M. B. Wunder.

The Indiana secretary of state has received notice of the dissolution of the Henry Brothers Lumber Company of Veedersburg.

Pianos and piano players will be manufactured at Laporte by the Orpheola Company, which has been organized by E. O. Best, E. J. Wergard and B. B. Vedder. The company has been incorporated with $50,000 capital.

The E. C. Atkins Memorial Association, consisting of employes of E. C. Atkins & Co., decorated the graves of 122 former employes of the company on Memorial Day.

A veneer mill is to be leased in this city and a veneer mill plant built at Edinburgh by the newly organized W. T. Thompson Veneer Company, which has been incorporated with $35,000 capital stock. Those interested in the company are Bedna Young, Evansville; R. E. Custinger, T. M. Cutsinger and W. T. Thompson of Edinburgh.

Employes of the National Casket Company were entertained at a banquet and theater party by the company on the evening of May 26. The banquet was held at the German House and was followed by a theater party at the Murat Theater.

Conditions are becoming normal in planing mills where employes have been on strike for a closed shop since May 1. The places of most of the strikers have been filled. About 700 carpenters were locked out for a while by the contractors, when carpenters employed by contractors having their own planing mills refused to use non-union planing mill products. The contractors have allowed the carpenters to return to work pending further negotiations.

MEMPHIS

Weather conditions throughout this territory during the past fortnight have been reasonably favorable for work in the woods. Heavy rains occurred about ten days ago but since that the time the weather has been dry and the rainfall has not materially interfered with logging operations. The supply of timber in sight is good and lumber interests here are of the opinion that they will be able to secure all the logs needed for their plants. The overflow water has receded entirely and logging operations have been resumed on both sides of the Mississippi in the low lands where most of the timber lies.

There has been some delay in the plans of Russe & Burgess, Inc., in connection with the tearing down of their old mill and the beginning of the construction of the new. It was expected that the old mill would be torn down early in May but the firm has such a large supply of timber on hand that this was impossible. Mr. Burgess said recently that it would take at least three weeks of double shift to take care of the timber on the yards and that the tearing down of the old mill would not begin until about July 1. All of the timbers for the new mill have been delivered but so far none of the machinery has been received. The mill will have a capacity of between 45,000 and 50,000 feet per day. It will be equipped with a resaw and will be one of the most up-to-date plants in Memphis. The firm will have its sawing done by a custom mill during the time it is building the new plant. The latter will not be in readiness for operation until early this fall.

J. H. Townshend, manager of the Southern Hardwood Traffic Bureau, is in receipt of information from the Interstate Commerce Commission at Washington that the hearing in the case of James E. Stark et al vs. the Illinois Central et al which was set for June 12, has been postponed until September. This case involves a reduction in rates sought by the Southern Hardwood Traffic Bureau on hardwood lumber shipments from Memphis and other points south of this city on the Illinois Central system, to Chicago, Ohio river crossings and other northern points. A rate of fifteen cents per hundred pounds from Memphis to Chicago is one of the specific items in the petition. Lumber exporters here have learned with regret of the failure of the steamship companies and the railroads to reach an agreement at the conference recently held at Hot Springs, Va., looking to an adjustment of the through bill of lading controversy, and the granting of free demurrage by the steamship companies at New Orleans on export shipments of lumber over the west side lines. The steamship companies have given notice that the agreement recently entered into governing these points will be abrogated June 23. It will be necessary for the west side lines, however, to file tariffs with the Interstate Commerce Commission, and the Southern Hardwood Traffic Bureau is preparing to secure a hearing from the Interstate Commerce Commission before this subject is finally disposed of. A prominent exporter here recently said that he believed the whole matter would be amicably adjusted and it would be possible to handle export shipments of lumber by way of New Orleans on through bills. He pointed out that the railroads have been virtually forced by the Interstate Commerce Commission to handle cotton shipments on through bills and that it is impracticable for the carriers and the steamship companies to discriminate in favor of cotton and against lumber.

The subject of annual contracts on export shipments of lumber to Liverpool, Amsterdam and other points has come up for consideration. The steamship companies have intimated that they will not enter into annual contracts another season. Exporters here, however, have made no efforts to close contracts for another year. The present ones do not expire until September and it will probably be sometime yet before they take up the subject of a renewal of these contracts. They do not believe that they will have any trouble in making arrangements that will be quite as satisfactory as those now in force.

W. H. Russe of Russe & Burgess Inc. has been named as chairman of the foreign trade department of the Business Men's Club. Mr. Russe has been prominently identified with the export lumber business here for a number of years and is probably more familiar with trade conditions abroad as affecting lumber and other commodities than any one in this city.

The annual report of the Memphis Freight Bureau has recently been made by L. R. Donelson, president. One of the features of this report was the appeal on his part to the various business organizations to get together and form a traffic bureau that would take care of all interests. He thought this would be a very much better method than the present

MEMPHIS

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Manufacturers Southern Hardwoods
Quartered Oak a Specialty
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TIMBER ESTIMATES
REPORTS INCLUDED
TOPOGRAPHICAL MAP, DETAIL ESTIMATES & WRITTEN REPORT
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ENGINEERS
Clarence W. Griffith Department Manager, Porter Building. Memphis, Tenn.

The Mossman Lumber Co., Inc.
Manufacturers
plain and quartered red and white oak, ash, gum and poplar.
ALSO FULLY EQUIPT DIMENSION PLANT
Memphis, - - Tenn.

plan of maintaining separate bureaus for the different industries. Readers of HARDWOOD RECORD are familiar with the efforts which were made here during the past year to establish a consolidated traffic bureau that would represent the Lumbermen's Club of Memphis, the Memphis Manufacturers' Association and the various other interests represented by the Memphis Freight Bureau. The plans along this line failed, however, and the lumbermen organized the Southern Hardwood Traffic Bureau, which is handling matters pertaining to lumber tariffs.

The tow boat, Dolphin No. 3, owned by the Patton-Tully Transportation Company, is laid up near Walnut Bend, Whitehall, Ark., with a cracked shaft. The Joy Patton has been sent to the relief of the injured boat and will bring the latter to Memphis where it will be placed in repair. The Patton-Tully Transportation Company is an adjunct of the Anderson-Tully Company and has been used for a number of years in bringing logs and lumber from the Mississippi and its tributaries to Memphis.

The Ferguson & Palmer Company, Paducah, Ky., has already begun the erection of its sawmill at Houlka, Miss. The company owns extensive timberlands in that section amounting to about 10,000 acres and the mill is being erected for the development of the timber thereon. The sawmill will be 40 by 200 feet and will be equipped with a band saw. The plans of the company also contemplate the construction of a railroad about ten miles in length to facilitate the handling of the timber. It is estimated that the improvements planned by the company and already in progress will cost about $50,000. Homes are being constructed at Houlka for the men who will be identified with the management of the mill. Donald Palmer will be in general charge. The headquarters of the company will be kept at Paducah. Earl Palmer, a member of the firm, passed through Memphis sometime ago to make preliminary arrangements for the work which is now under way.

The Bellgrade Lumber Company will soon be ready to proceed with the removal of its mill from Belzoni to Isola. The company has almost completed cutting its timber at the former point and will remove its mill and logging equipment to Isola where it has extensive timberland holdings. It is proposed to construct the necessary buildings for the sawmill machinery before the removal is made so that this can be accomplished with the minimum of delay. T. L. Cathey and J. W. McClure are the principal owners of the Bellgrade Lumber Company and the headquarters of the firm are maintained at Memphis.

J. W. Thompson, who has been prominently identified with the hardwood lumber trade of the country for a number of years, has accepted service with Howard Cole & Co. Inc. at St. Louis. Mr. Thompson has already left Memphis to assume his new duties. Mr. Thompson was for years at the head of the J. W. Thompson Lumber Company, which liquidated its affairs here several years ago. Since that time he has been in business on his own account under the name of the J. W. Thompson Hardwood Company. Howard Cole & Co. Inc. deal in timberlands on an extended scale. Mr. Thompson is very familiar with the timber supply of the valley states.

The Arkansas-Indiana Lumber Company completed a large plant at Clarksville, Ark., for the manufacture of veneer baskets. The company at present is making baskets for the handling of the Arkansas peach crop, but the plant is equipped with machinery for the manufacture of baskets of almost ewery kind and the company proposes, after the fruit crop has been marketed, to branch out into the manufacture of baskets for distribution throughout the country.

The most important sawmill transaction in Memphis for a number of months is represented by the transfer of the sawmill and veneer plant of C. L. Willey in North Memphis to the J. V. Stimson Hardwood Company. This was effected here a few days ago. The new owner has already placed the plant in operation and proposes to run it on full time. The combined capacity of the mill and veneer plant is about 90,000 feet per day. Mr. Stimson came to Memphis several years ago from Huntingburg, Ind., and has been at the head of the J. V. Stimson Hardwood Company. He still has extensive interests at his old home.

NASHVILLE

A small blaze at the plant of the Cumberland Heading Company recently destroyed the shaving house. The plant was saved with difficulty.

Building in Nashville is not so active as at this time one year ago. This is particularly true in the matter of building dwellings. A number of large building enterprises are under way, involving many hundreds of thousands of dollars. The building permits issued in Nashville for the month of May were for improvements costing a total of $117,275.50.

Several members of the Nashville Lumbermen's Club were in attendance at the annual convention of the Tennessee Manufacturers' Association held at Memphis June 4 and 5. There has been much activity on the part of Tennessee manufacturers the past year or two in efforts to secure progressive legislation for the encouragement of new industries and a square deal for old ones. Capt. C. D. Mitchell of Chattanooga is president.

There is a movement on foot by the Nashville Manufacturers' Association to establish a permanent exhibit of Nashville-made products. Nashville is one of the most important manufacturing centers in the South. Plans have about been perfected to lease a building on Second avenue, which will be converted into an exposition building. The building has a floor space of 36,000 square feet. There are about 400 local manufacturers.

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TENNESSEE
LOGS { Yellow Poplar / White Oak / Red Oak
DIAMETER
3 ft.—4ft.—5 ft.—6 ft.
We want to cut above per your instructions
Lumber can be cut
Any thickness—Any Widths—Any lengths.
"Specialty Man"
1-2 5-8 3-4 4-4 5-4 6-4 8-4 10-4 3 4 5 6 7 8 in. thick
6 8 10 12 14 16 18 20 22 24 feet long
18 to 22; 23 to 29; 30 to 39; 40 and up Panels
Specialties
Panel Stock—Qrtd. W. O. Flitches
Just bought above tract timber and want a contract.
WRITE US
WHITSON BROS. LBR. CO.
J. H. Whitson. W. L. Whitson. H. T. Whitson.
Cookeville—Tenn.—Algood
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CIRCASSIAN
We are slicing a large shipment of genuine Circassian logs which are developing some striking figure; in fact—
We have secured some unusually dark and beautifully figured veneer for the finest cabinet work.
Your inspection is solicited
Fred W. Black Lumber Company
Chicago
Take Douglas Park "L" to 40th Ave. and walk one block south

J. W. Hastings & Son will open bids June 25 for rebuilding a sawmill at Big Sandy, Tenn., machinery to cost about $1,000; daily capacity 10,000 feet.

W. A. Rockwell and B. F. Hamilton are having erected at Harriman, Tenn., a modern band sawmill, with a daily capacity of about 30,000 feet. The firm will erect all necessary dry houses and buildings for handling the output, and hopes to have the plant in operation by July 1.

The Riverside Lumber Company of Knoxville, Tenn., has been granted a charter by the secretary of state. Authorized capital stock is $50,000.

LOUISVILLE

The W. P. Brown & Sons Lumber Company is now permanently represented in Chicago, an office having been opened in the McCormick building.

Kentucky Lumber Company
MANUFACTURERS
POPLAR, PLAIN AND QUARTERED OAK, RED AND SAP GUM, ASH, CHESTNUT, BASSWOOD, HEMLOCK, WHITE PINE
Mills at
Burnside, Ky. Williamsburg, Ky.
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Hardwood Manufacturers and Jobbers

SHAWNEE LUMBER CO.
HARDWOODS, WHITE PINE and HEMLOCK
Sales Office—South Side Station—C. H. & D. R. R.

JAMES KENNEDY & CO., Ltd.
OAK, POPLAR AND OTHER HARDWOODS
FIRST NATIONAL BANK BUILDING

The Kosse, Shoe & Schleyer Co.
WALNUT, OAK, AND OTHER HARDWOODS
103-4-5 CAREW BUILDING

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Manufacturers & Importers FOREIGN VENEERS
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SPECIALISTS IN WIDE STOCK
POPLAR, OAK, CHERRY, BIRCH

GEORGE LITTLEFORD
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OFFICE: 1263 RICHMOND STREET

SWANN-DAY LUMBER CO.
Mfrs. YELLOW POPLAR and WHITE OAK
SALES OFFICE—SECOND NATIONAL BANK BUILDING

RIEMEIER LUMBER CO.
OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

It is in charge of Ben Stoll, who has had much experience in the hardwood trade of that market. The Brown company has pursued a policy of steady expansion, having enlarged both its producing and sales facilities of late.

Edward S. Shippen, president of the Louisville Point Lumber Company, has returned from Catlettsburg, Ky., where he went to look over the log market. He picked up a nice bunch of walnut logs. The logs are excellent both as to size and quality.

H. E. McCowen, president of the Ohio River Sawmill Company, whose home is in Salem, Ind., has been spending more time in Louisville than heretofore, the increasing business of the local company demanding much of his attention.

The Norman Lumber Company and the Richland Parish Lumber Company, local concerns with mills in Louisiana, have fully recovered from the slight interruption caused by late floods in the lower Mississippi valley. There was not at any time enough water in their yards to cause any damage, and the only result was a short cessation of manufacturing operations.

James L. Berry, a pioneer sawmill man of Louisville, died at his home in this city recently at the age of fifty-four. Mr. Berry started manufacturing lumber at Fisherville, Ky., later coming to Louisville, where he formed a partnership with Edward L. Davis. The latter bought out the interest of his partner after several years and established the Edward L. Davis Lumber Company. Mr. Berry had not been active in business for some time before his death, which was due to heart trouble.

The Louisville Hardwood Club has enjoyed some admirable papers from its members lately, the program of business talks arranged several months ago having been carried out to the advantage of the club and individual members. Recent addresses have been by D. E. Kline of the Louisville Veneer Mills; T. M. Brown of the W. P. Brown & Sons Lumber Company, and Stuart R. Cecil of the Booker-Cecil Company. Mr. Kline discussed the necessity of figuring costs in the sawmill business; Mr. Brown went into the changes which have taken place in the hardwood trade in recent years, and Mr. Cecil handled the buying end of a wholesale lumber business. All of the addresses were full of wit and wisdom, and were followed by discussions in which most of those present participated.

The Louisville Veneer Mills has the champion pie-baker of Jefferson county in its employ. She prepares the lunches which are served for the office force and department heads of the plant, and not only puts on the regular menu in fine style, but likewise adds an artistic finishing touch by turning out, on occasion, such pies as are looked back upon with the fondest of recollections. Those having business dealings with the concern are advised to reach there in the neighborhood of the noon hour, and to secure in advance, if possible, a schedule of the pie days of the Kline maitre de cuisine.

The Hardwood Club of Louisville has decided to co-operate with Maley & Wertz and other hardwood manufacturing concerns of Evansville as well as other cities which are interested, in taking up with the Interstate Commerce Commission the question of having the Louisville & Nashville Railroad change its tariff so as to make it possible, in using the transit privilege, to ship out hardwood lumber for hardwood logs, instead of offsetting tonnage in the form of individual woods. The probabilities are, however, that before the case is finally disposed of, it will take the form of a request for the institution of flat rates, which would, of course, eliminate all of the red tape and difficulties incident to the effort to secure the doubtful advantages of transit.

The Interstate Commerce Commission will soon pass upon the case put before it by local hardwood concerns, which asked that the matter of the bridge toll figuring in rates in and out of this city be properly adjusted. At present the rates in from the South include a bridge toll, though Louisville is on the south bank of the river; while shipments out likewise contain a charge to cover crossing the bridge. The local shippers take the logical ground that they ought to pay only for service that they actually get.

The Mengel Box Company is putting up some additional sheds at Twelfth and Dumesnil streets, where its box factory is located. The concern does some lumber rehandling here, though its mills are at Hickman, Ky., and Mengelwood, Tenn.

J. V. Stimson, the well-known hardwood manufacturer, was in Louisville recently, and confirmed the report of his acquisition of an additional mill in Memphis. He said that after this year the mill at Owensboro, Ky., which has been running for twelve years, will probably be closed down and dismantled, as most of the available timber has been cut out.

The Louisville & Nashville Railroad has recently raised its rates on lumber from points in Tennessee and Alabama to Louisville, the increase being from one to two cents. It is said that other roads serving this territory are contemplating similar action.

W. A. McLean, president of the Wood-Mosaic Company of New Albany, Ind., reports that the recent fire which destroyed the company's mill at Highland Park, a suburb of Louisville, would cause no serious interruption to business. The wants of customers will be supplied from the large stocks of lumber carried at the yard, which was not damaged, while the veneer and flooring operations, all being confined to the New Albany and Rochester plants, will go on just as before. The company will immediately rebuild on the site of the burned mill.

ST. LOUIS

During last month 913 building permits were issued for new buildings, alternations and repairs by the St Louis building commissioner, at an estimated cost of $1,392,655. This is a decrease of about thirty percent compared with the building operations during May, 1912.

Receipts of lumber by rail at St. Louis during May this year as reported by the Merchants Exchange were 20,326 cars. May last year the receipts were 18,195 cars, showing a gain in receipts this May of 2,131 cars. Shipments of lumber by rail last month were 14,970 cars. A year ago the shipments were 12,717, an increase this May of 2,253 cars. There were no receipts or shipments by river either this year or last.

F. J. Watsek, formerly connected with the traffic department of the American Hardwood Lumber Company, has become associated with the Chas. D. Borrowman Lumber Company, as office manager.

The offices of the Wabash Hardwood Lumber Company at Memphis have been closed and the company has been consolidated with the Hooton Hardwood Lumber Company. The Memphis concern was owned by the Hooton company and hereafter the two will do business under the name of the Hooton Hardwood Lumber Company.

The Chas. F. Luehrmann Hardwood Lumber Company reports a satisfactory volume of business being done, although orders are not coming in quite as freely as they did a few weeks ago. It is satisfied, however, with their trade and also with conditions.

A reception was given by the Lumbermen's Club in its rooms to the members and their friends, on Tuesday, May 27, from 12 to 2 o'clock. The object of the reception was to show the recently redecorated and rearranged rooms of the club and to give the members an opportunity to meet the new secretary of the club, O. A. Pier. A colored orchestra in the directors' room rendered music and a general get-together time was had.

Frank J. Liebke, vice-president of the C. F. Liebke Hardwood Mill & Lumber Company, was married to Miss Dorothy Wall, daughter of Mr. and Mrs. Nicholas R. Wall of Westminster place, Tuesday evening, June 3, at 8 o'clock, at the residence of the bride's parents. Mr. Liebke and his bride will be home after September 1 at 5418 Cabanne avenue.

ARKANSAS

The Arkansas & Indiana Lumber Company of Clarksville, Ark., has recently installed and is now operating the largest veneer basket factory in the state. H. L. Mowrey has been employed by the company as manager of the new plant, and he asserts that the company will soon be in position to fill orders in large quantities for crates, boxes and baskets. Clarksville is located in the heart of the peach district, and there is now a large demand for peach baskets in that section. The company will devote its attention for the present to manufacturing these baskets, but after the peach season is over the plant will add other machinery and make baskets of all kinds in large quantities. The company recently bought the retail yard at Ozark, Ark., formerly owned by the Acme Lumber Company. It has been rumored that this company will also buy in the near future other yards along the Iron Mountain railroad between Little Rock and Fort Smith.

The Talley-Wasson Lumber Company of Batesville, Ark., one of the largest lumber companies in North Arkansas, has recently been dissolved. Charles Wasson has bought the interest of W. S. Talley, and will continue to run the business under the name of the Charles Wasson Lumber Company. Mr. Talley expects to leave during the next few weeks for Florida where he and his family will reside.

J. B. Robinson, who has for many years been connected with the Whitcomb-Robinson Lumber Company of Little Rock, has recently disposed of his interest in the company to R. L. Wilder. Mr. Wilder has assumed active connection with the company, and will look after the operation of some sawmills which the company has in this section. The new concern owns several million feet of standing timber near Little Rock, and the sawmills will be used in cutting this for the company. The name of the lumber concern has been changed to Whitcomb-Wilder Lumber Company, and the local plant will be under the supervision of Mr. L. M. Whitcomb.

There is considerable doubt among the whiskey men of the state that the prohibition measure passed by the last legislature will stand, but every one concedes that Arkansas will continue to supply her share of the beer kegs used in the United States as long as that beverage is brewed in this country.

H. Devecke of Hamburg, Germany, representative of J. F. Mueller & Son, has spent considerable time during the past month in Arkadelphia conferring with the Arkadelphia Milling Company in the interest of his company. The citizens of that town attach considerable importance to his visit and are expecting some activity in the local stave market on that account.

The work on the construction of a large sawmill near the Iron Mountain Railroad and adjoining Arkadelphia has been begun, and the owner, R. O. James Company, expects to have the mill in full operation within a short time. This plant will employ a number of men and also add greatly to Arkadelphia's lumbering industry.

The Forest Products Manufacturing Company having exhausted the timber near its mill on Kings river has closed down that plant and is moving the machinery to Berryville, where a new plant will be erected. The company has been buying stave bolts pretty heavily for several weeks and has a large supply on hand for use as soon as the new plant is ready for operation. This plant will have a payroll of about $1,500 per week, and will give employment to about 100 men.

The Chicago Mill & Lumber Company at Blytheville, Ark., has recently completed a large building 200 by 200 feet, in connection with its mill, which will be fitted out with up-to-date machinery for the manufacture of boxes. The company has plans under way for the erection of a large log clip on the north side of its mill.

MILWAUKEE

Lumber companies in the northern part of the state are experiencing difficulty in securing sufficient help with the opening of the lumbering operations. Another difficulty is in holding men at the camps, as it is claimed that they get little recreation and return to the cities after a month or two for a more varied life. The local branch of the state free

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POPLAR SPECIALISTS
We have always made a distinct specialty of Poplar, Rough and Milled. Have 3,000,000 feet nice, dry stock at Cincinnati now, and some at our mills.
CAN WE SERVE YOU?
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HIGH GRADES IN SOUTHERN HARDWOODS A SPECIALTY

E. C. BRADLEY LUMBER CO.
HIGH GRADE WEST VIRGINA HARDWOODS
GOERKE BUILDING

Johns, Mowbray, Nelson Company
OAK, ASH, POPLAR & CHESTNUT
GUM AND COTTONWOOD

employment bureau has been sending several hundred men to the northern woods during the past few weeks. Representatives of lumber companies have been stationed at the employment office, lining up workmen to send north. The employing company pays the fare but holds the baggage as security until the employe reports for work.

The Berlin Machine Works, at Beloit, is about to erect a woodworking machinery manufacturing plant. The structure will be partly one and partly two stories high, of brick and stone construction and with dimensions of 294 by 275 feet.

The last log drive on the Peshtigo river, down which billions of feet of timber has floated in the fifty years that logging has been carried on, is that being received by the Peshtigo Lumber Company. The Peshtigo Lumber Company only recently completed its $150,000 sawmill which replaces the one destroyed by fire last fall. It has a daily capacity of 125,000 feet. With the present drive no more logs will be received at this mill by water but all the timber will be sent by rail.

S. B. Sanderson, manager of the Republic Lumber Company, which recently closed out its business at Marinette and G. M. Sanderson have formed the firm of S. B. Sanderson & Co. They will engage in the lumber brokerage business at Menominee, having headquarters in the Stephenson estate block.

J. F. Conant & Co. have organized at Two Rivers for the purpose of manufacturing baskets, hampers and fruit packages. Mr. Conant is the head of the concern and is also manager of the Wisconsin Woodworking Company at that place. The woodworking company will supply the new concern with veneer.

The remaining lot of lumber of the North Wisconsin Lumber & Manufacturing Company and the Diamond Match Company's warehouse at Hayward has been taken over by the Hayward Lumber Company, organized by D. S. Peck, Clay Smith and Wayne Peck.

The Eureka Cooperage Company is preparing to operate its plant on Racine street, at Menasha. Machinery is being installed as soon as it arrives and the plant will be started as soon as possible.

W. D. Morgan of Ladysmith is in charge of a crew of men at McIntosh, Ont., building a sawmill for the Morgan Lumber Company. The machinery of the Morgan company's mill at Hawkins has been shipped to McIntosh and will be used in the mill. The company has a cutting contract for three years. The Morgans will continue the wholesale lumber business and make their headquarters for their Canadian operations in Wisconsin.

The assembly at Madison has passed to engrossment bill 588A, correcting and amending the workmen's compensation act as desired by the industrial commission. The substitute amendment, which takes place of the original bill, fixes a flat rate for injuries and makes other changes. Among these are cutting out the defense of contributory negligence. It also provides that on and after September 1, 1913, every employer of four or more employes shall be deemed to have elected to come under the operation of the act unless prior to that date he notifies the commission that he does not so elect.

A law which has just been passed by the legislature and signed by the governor is of interest to the lumber industry. It provides that any person, who shall do or perform any labor or services in cutting, hauling, running, felling, piling, driving, rafting, booming, cribbing, towing, sawing, peeling or manufacturing into lumber or timber any logs, timber, stave bolts, heading, staves, pulp wood, cordwood, firewood, railroad ties, piling, telegraph poles, telephone poles, fence posts, paving timber, tan or other barks or in preparing wood for or manufacturing charcoal shall have a lien upon such material for the amount due or to become due for any such labor or services, which lien shall take precedence over all other claims, liens or incumbrances thereon or sales thereof, whether such claims, liens or incumbrances or sales are made, created or accrue before or after the time of doing such work, labor or services.

Joseph Kerwer, for twenty-five years vice president of the Wilbur Lumber Company of Milwaukee, died recently at his home, 2319 Coldspring avenue. Mr. Kerwer entered the lumber business when sixteen years of age and was connected with the Wilbur concern for thirty years. He was a native of Milwaukee, having been born in this city in January, 1858. He had been an invalid for the past seven years. The widow and four daughters, all of this city, survive him.

Herman Freyberg, vice-president of the C. B. Freyberg Lumber Company, Sheboygan, passed away recently at a private sanitarium after an illness of several weeks. Death was due to heart trouble. Mr. Freyberg was sixty-three years old, having been born in Germany in 1850. He conducted a sawmill and lumber yard in Sheboygan with his brothers for many years, later operating a sawmill at Washington Island for seventeen years. For the past sixteen years he had been engaged in the lumber business here. Five children survive him, his wife having died five years ago.

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WEST VIRGINIA HARDWOODS
Soft White Pine, Oak, Poplar, Chestnut, Hemlock
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COMPLETE PLANING MILL FACILITIES
RIDGWAY PENNSYLVANIA

AT HALF PRICE
STEAM SKIDDER AND LOADER COMBINED
Clyde Modern Equipment. Used about sixty days. Operations discontinued. No further use for it
For Particulars Write
GOGEBIC LUMBER CO.
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SAWYER GOODMAN CO.
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Mixed Cars of Hardwood, Basswood, White Pine and Hemlock, Cedar Shingles and Posts
We make a specialty of White Pine Beveled Siding and White Pine Finish and Shop and Pattern Lumber

The Tegge Lumber Co.
High Grade Northern and Southern Hardwoods and Mahogany
Specialties
OAK, MAPLE, CYPRESS, POPLAR
Milwaukee, Wisconsin

DETROIT

The Hartwick Lumber Company's yards located at Clay avenue and the Grand Trunk Railway were destroyed by fire on the evening of May 31, $20,000 damage resulting. The fire started in a pile of shingles and was caused by a spark from a passing locomotive. The fire spread rapidly and owing to the fact that the fire department was busy with another fire in the same locality, the flames had gained considerable headway before the apparatus arrived. A large stock of hardwoods was destroyed. The stock was fully covered by insurance. The work of cleaning up the debris was started the morning following the fire. Business was not seriously affected owing to the fact that the company has two other well stocked yards in the city.

Secretary John Lodge of the Dwight Lumber Company reports that business has been excellent the past fortnight. The hardwood flooring mill has been exceptionally busy and orders and inquiries have been plentiful. Mr. Lodge also reports that the demand for hardwoods for building operations is opening up briskly and that a busy season is in prospect in this line.

The building industry in Detroit is at its height and dealers say that it will go down into history as the greatest the city ever saw. The

great building boom has created a big demand for hardwoods and a member of a local firm recently said: "The hardwood business is not a market; it is a riot."

The Brownlee Lumber Company, recently incorporated, took over the business of the Brownlee-Kelly Company, Mr. Kelly retiring from active business temporarily. The president, general manager and practically sole owner of the concern is William E. Brownlee, whose father founded the business forty-three years ago. Horace A. Ross, a well known and popular lumberman, has joined the Brownlee forces as secretary, treasurer and sales manager. The company operates large yards in the River Rouge (South Detroit) district and is an extensive handler of hardwoods in cargo lots from lake shipping points. Mr. Brownlee made a business trip through the lumbering districts of northern Michigan last week and declares that the cuts made last winter were entirely satisfactory and that the mills are doing their utmost to get their stock on the market.

The new plant of the Birdseye Veneer Company at Escanaba is one of the largest in that section of Michigan. The company has logs enough in its yards to allow the plant to run three months and others already contracted for are on the way.

Edw. W. Leech will hereafter deal exclusively in hardwoods at wholesale and will not handle lumber at retail. The company will maintain its present offices and yards at Seventeenth street and Warren avenue.

The Hardwood Market

CHICAGO

The Chicago trade gave itself over pretty fully last week to plans for the entertainment of visitors during the convention of the National Hardwood Lumber Association held on Thursday and Friday, and to carrying out these plans after the delegates had arrived. For this reason trade during the latter part of the week, at least, was more or less demoralized. It is evident, however, that very little change has been noted during the last two weeks locally. It is perhaps true that the laxity in demand apparent two weeks ago was slightly accentuated since that time. In yellow pine there is noted a slight tendency to transit shipments, although it had been hoped by the yellow pine contingent that the transit shipments immediately following the floods had taken care of that feature. So far this condition has not spread to the hardwood trade. The apparent dullness of the market is unquestionably for the most part merely a seasonable proposition, and has not so far resulted in any panic of price cutting. In fact, the consistent holding of prices continues to be the remarkable feature of the hardwood trade in spite of apparent falling off in demand. No great amount of dry stocks are yet coming in from northern points, nor is there likely to be any flooding of the local market with stocks from Michigan and Wisconsin. Probably the present laxity will continue during the early part of the summer and until the local consuming trade feels itself in position where it can buy for fall purposes.

NEW YORK

In a comparative sense the New York hardwood market may be said to be favorable. Taken up in its various phases it is noted that demand in some stocks has fallen off; prices continue high and firm, and stocks in general at mill points are scarce and well held. The opinion prevails that mill conditions are such as to preclude any bad breaks in values, and in the wholesale trade there is no reason for making forced sales at price concessions. Most of the buying is for immediate needs but this is not unsatisfactory under present conditions of supply. That the demand will increase is unquestioned and it is better to be prepared when that time comes then make concessions now simply to increase sales. Oak, ash and maple continue in best call with ash possibly in the lead. Some complaint of a scarcity of thick stock is heard. The list in general is well held on high values and improvement is looked for shortly in the market as a whole.

BUFFALO

The hardwood dealers are getting a fair amount of business, but buying is more or less of a hand-to-mouth character and in the opinion of many is likely to be so for the remainder of the month. Labor troubles and the tariff are assigned as the reasons for slowing up in ordering. Yet business is not much under the average at any yard, while some dealers say they are doing about as much today as they were a year ago. Certain industries are curtailing, but others are ordering about as usual

Plain oak continues to be in the lead in activity as well as in price strength. There seems to be a continued heavy demand right along as compared with the amount of stock available. Mills have not been able to ship as much dry stock as desired. Brown ash is another wood much wanted and maple is also in good demand. While most mill prices are very stiff on these woods, some dealers are reporting that they have been getting more offers of stock than usual and that the lumber is obtainable at less money. Lake hardwoods have not begun to arrive in much volume as yet.



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PHILADELPHIA

Although the buying market has been less prominently active during the last fortnight, the hardwood situation is without a weak spot anywhere. A menacing apathy in one or two lines of high grade woods is reported, but only in isolated cases; in low grades everything is sold to the bare ground, with prices firm. The wholesale consuming industries continue fairly busy, with outlook encouraging, but the increasing fear of a break in values in the near future, although without tangible support, evidently deters the buyer from placing orders beyond actual requirements. Dry stocks are scarce, and where there has been any accumulation in the pile at mill points there seems to be no inclination on the part of the manufacturer to sacrifice it. Box makers are still busy, but continued activity will depend largely on the effect the protracted tariff adjustment will eventually have on the box employing industries. Owing to a cautious financing of operation work by financial institutions, the local building work has not advanced with the advent of spring.

Hardwood values on the whole are firm, with an upward trend in one or two of the most desirable lines, and altogether the situation is satisfactory and the outlook promising. Plain and quartered oak keep the lead; ash is in good demand, with firm prices; high grade chestnut lacks snap; sound wormy chestnut improving; poplar, except low grades, remains a little quiet; [illegible] in good repute; beech, cherry and basswood find new friends. No [illegible] in mahogany and veneer trading.

PITTSBURGH

The hardwood market is behaving remarkably well considering the fact that there is quite a slump in demand in price of yellow pine and hemlock. In good hardwoods there is not only a good demand but prices are being well maintained. No falling off at all is noticed in demand for or price of white oak. There is a little weakening in spruce. Chestnut is about holding its own, especially on good stock which may sell this month at a trifle less than in May. Furniture hardwoods are good sellers at good prices. Manufacturing and industrial concerns are using a large amount of lumber for repair and construction work. Trade with the mining companies in pit posts, etc., is good and prices bid fair to be higher before fall if the present mining activity continues. June is starting off a little backward and wholesalers are not making any prediction about what this month will do in business. May broke all records for the past five years. Every line of buying except from the retail yards was pretty satisfactory.

BOSTON

No one in the Boston market handling hardwoods even hints at concessions in price. The demand has been of very fair size since the spring trade opened up and prices have been held in a very steady way. There have been years when demand for hardwoods has been more active than it is at the present time, but it is seldom that the undertone of the market has ruled so firm as it has for many months. Other years the offerings have been larger than they are at present. A feature of the market today is the small offerings that those firms doing a strictly commission business are receiving. This is due to the fact that mills have small stocks of dry lumber and also that more manufacturers of hardwood lumber are selling direct to consumers.

Dealers here have trouble in locating lumber of the thickness desired by buyers. This is particularly true of plain oak. The offerings of the latter are much below normal and buyers are willing to place larger orders in some cases than dealers can take care of. Stock well manufactured in all thicknesses is in good call. For quartered oak there is a very good demand at firm prices. Hardwood flooring of about all kinds is in fair demand. The volume of business reported in the market for cypress has been moderate. Many buyers have felt that prices might go lower and for this reason they have been operating in a rather limited way.

BALTIMORE

Reports as to the condition of the hardwood trade in this market are more or less conflicting. On the one hand statements are made that business has fallen off and no longer reflects the activity that prevailed during the first part of the year and throughout the winter, while other reports are to the effect that in the past few weeks a sort of revival has taken place and that the movement at this time compares favorably with the demand for any previous period. There seems to be no doubt that temporarily at least a marked cessation in the inquiry was to be noted, but it is evidently also true that buyers have begun to show interest in stocks again, the distribution now being represented as approximately equal to what has gone before. It looks as though the yards which stopped buying to a considerable extent in April and part of May, have found their requirements larger than they had suposed and have ascertained by experience that they would have to place orders with greater freedom. Certain it is that for the present the movement of hardwoods of all kinds compares favorably with the earlier months of the current year, and reports are by no means infrequent that hardwood firms and corporations are once more making progress in so far as the volume of their business in concerned.

As to prices, so far there has been no let up. The quotations have been well sustained all along the line, with some advances here and there. This is particularly the case with respect to certain grades of chestnut, which have held their own in a remarkable way in point of inquiry and have developed such limitation of selection that the buyers are disposed to hold out inducements in the way of prices. Sound wormy has been drawn upon to a degree which leaves the mills with very scant assortments, no headway toward the accumulation of liberal supplies having been made thus far. It is much the same with ash and still more so with oak, of which latter wood the mills have moved their output about as fast as it was produced. Poplar also is in fair request, with no troublesome accumulations, and with the price list well sustained. The gain made by extra wide lumber holds and the offerings of such stocks are taken up in quantities that leave no ground for apprehending undue competition. Gum is in excellent demand, with something of a shortage in the supply. The floods in the Mississippi valley last spring put the mills there out of the running so long and caused such direct damage in the way of injury to the lumber manufactured that supplies are now in urgent request, with the quotations relatively high. Basswood is also moving freely, at very acceptable figures.

With the foreign market it is different. Stocks of oak planks have gone forward in such volume that the markets abroad, but more particularly the Liverpool trade, are very decidedly congested and the range of prices has gone off to such an extent that profits disappear entirely. In many instances it is to be feared that actual losses are made. More than ever the advice not to ship on consignment is in order. Other divisions of the export trade, with the exception of poplar are in fair condition, poplar being in inordinately plentiful supply, and the quotations also having eased off. Taken altogether, however, the hardwood business is in better shape than might be supposed, although a feeling of uncertainty prevails because of the political development and more or less hesitancy on the part of investors.

COLUMBUS

Although the weather during the past fortnight has not been the most favorable for an active hardwood trade, still the movement of all grades and varieties has been good. Generally speaking, prices have been well maintained and the outlook for the future is promising. With better weather, trade along all lines is expected to improve to a large degree.

One of the best features of the trade is the prospect for active building operations in all the cities and towns in the central part of Ohio. Plans have been prepared and in many cases contracts have been awarded for an unusual amount of construction work. When this is under headway it is expected that the demand for all kinds of lumber will be increased.

Sales of hardwoods are pretty evenly divided between factories and yards. The former are good business since manufacturing circles have been active. Plants engaged in making vehicles, implements, automobiles and furniture are good buyers. Car stocks are also in good demand. Yard stocks are fairly large and buying from that source will not be increased until after yards are able to move stocks.

Dealers who were damaged by the flood have recovered almost entirely and have their inventories completed. Thus the trade is now on a good basis and little is noted to hinder an improvement. Collections are improving in every quarter. Some trouble is experienced from a car shortage but this is not yet serious. Congestion is reported on some of the railroads, due to the recent flood.

Quartered and plain oak are both strong and the volume of business is satisfactory. Prices are firm. There is a good demand for poplar and all grades are moving well. There is an increasing demand for the wide sizes. Chestnut is another strong point in the market and prices are ruling firm. An advance of $1 per M is reported in sound wormy chestnut. Ash and basswood are also strong. Other hardwoods are unchanged.

CINCINNATI

A steady inquiry for most all of the hardwoods continues in a satisfactory manner, indicating that present good business will continue for a time at least. There is not quite so much shipping as a week or so ago, indicating that some accumulation is occuring in the yards of the large wood consuming factories, but returning salesmen say no one is overloaded and that the lull in the market is only temporary. Many large concerns took advantage of inducements offered from some of the flood territory to lay in heavy stocks at a little off present high prices and quite a little flooded stock has since been shipped on the same basis but it is safe to say that this affects the shipping only temporarily and unless present tariff tinkering affects business generally, which is not expected, there will likely be a steady demand all of this year for all hardwoods. Cincinnati yardmen are carrying good-sized stocks but are not letting any opportunity pass to buy more. The feeling as to market conditions in this vicinity is decidedly optimistic, no one expecting anything like a slump in either price or demand. Slight depressions are reported from eastern territory and while this seems hard to explain, no apprehension is felt on this account. The trade in the Middle West is better than normal and will likely continue so.

The activity of low grades of poplar is just as pronounced as at any time during the past six months and many wholesalers usually well supplied with this class of stock are short. Top prices are asked and readily obtained, with good indications of a continuation of this condition. It is

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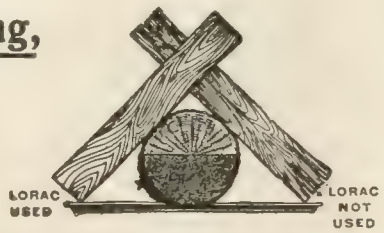
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the good grades No. 1 common and better that are backward, the market being unusually quiet. Poplar producers are now well supplied with stock in the better grades but are holding prices firm, very few concessions being reported. Some wholesalers are turning their attention to other woods and pass up poplar for the time being. There are good reports from producing fields, showing that millmen are not worried over the situation, but look for a spurty market in this wood during the remainder of the summer with demand growing better towards fall.

TOLEDO

Hardwood is strong on the Toledo market. Dealers continue to buy practically all dry stocks offered and prices are holding extremely firm. There is a good local demand for retailers from the building trades, which are very active at present. Inside finish and flooring are strong as many residences are being constructed and hardwoods are largely used in most of the residences being erected here. Furniture and vehicle factories are also good hardwood customers.

Plain oak continues to lead the market. Quartered oak does not gain much strength in this market. Elm is in good demand and the same is true of ash. Hickory is a little off just at present and poplar is scarcely as strong as it was. Generally speaking, however, the hardwood market is extremely strong here with excellent prospects for a splendid summer's run. Railroad lumber is holding firm. Cooperage stocks are in splendid demand and are ruling high. Boxing and crating materials are scarce and high.

INDIANAPOLIS

There has been a good hardwood trade during the last fortnight and conditions generally are better than they were this time a year ago. Prices are steady and the demand is sufficient to keep all of the hardwood concerns fairly active getting out orders. The trade was affected slightly by the strike of planing mill employes and the lock-out of carpenters, because the demand for interior trim was affected.

Now that planing mills are running again and the carpenters have returned to work, the hardwood people find themselves with a lot of business all at once. However, they expect to be able to handle the situation with little delay.

Oak, poplar and mahogany veneers are in special demand. These lines are exceptionally active and the prices are stiff.

NASHVILLE

There has been some slowing up in the demand for hardwoods in the Nashville market the past week or ten days, according to shippers and manufacturers. This is not displeasing to manufacturers, however, as they have had such a long run of prosperous business that they are willing to have a breathing spell and a little time to accumulate some material. There continues a good demand. Oak is selling at a high mark, and getting scarcer all the time. A fair movement is mentioned of chestnut, poplar, ash and other lines. The prices generally rule steady.

LOUISVILLE

May was one of the best months ever experienced by local hardwood concerns, and June is starting out in good shape, though hardly with the snap that characterized last month. This was not to have been expected, however, as June is naturally inclined to be a slower month than its predecessor, and the entrance upon the summer season usually has a somewhat retarding effect. However, there are plenty of inquiries for lumber going the rounds, and sales are in large volume. Some buyers are now inclined to hold off for various reasons; the furniture factories to await the outcome of the semi-annual exhibits, and other consumers to watch which way the tariff cat will jump, in the last analysis. It is believed that if the tariff is disposed of in short order it will help conditions materially. Oak prices are continuing strong, plain oak having advanced beyond previous quotations. Thick oak is a little quiet. Heavy oak timbers are in good demand, many sawmills doing little but trim up logs to enable the railroads to use the material in construction work. Implement concerns are buying hardwood lumber freely, good crops insuring active buying by the farmers. Ash is in good demand. Good poplar is quiet, but low-grades are selling well. Red gum is not so active as it has been.

ST. LOUIS

Business is a little quiet in hardwood circles. It is seasonable, however. There still continues to be a good demand for the majority of items on the list, especially those which are scarce. Plain sawed white oak has the call and prices obtained for this item are strong. There is also a seasonable demand for ash and wide poplar boards. Red gum and high-grade cottonwood are also in fair request. Local distributors are not worrying a great deal over the situation as those having a good stock of the most salable items can afford to wait for a time in disposing of their stocks, as they feel pretty certain that prices will advance before a great while on these items. The cypress situation is improving slightly with a fair demand coming from the yards and factories. This is practically true as to the orders from the North and Northwest. Not only are prices being kept up but in many instances they are improving.

ARKANSAS

Weather conditions in Arkansas have been unfavorable for the past few weeks. The woods and timbered lands are soft from unusually heavy rains in the late spring, and logging operations have been seriously handicapped. Most of the larger mills are running, some only on partial time, but many of the smaller ones have been closed down by reason of the fact that the logs cannot be hauled. In the cities and larger towns of the state much construction work is going on, and the reports on proposed building in all parts indicate that such activity will continue. In the rural districts, as is to be expected at this time of the year, the building is light, but much is being planned to be done a little later.

The lumbermen generally are expecting a heavy late summer and fall trade. Crop conditions are favorable for the farmers, and much building is expected among them as soon as the farming interests will permit their giving attention to it. Prices are firm, with a good strong export market. Slight advances are expected with the coming of the fall trade.

Unusual activity in the hardwood market has been noted along the eastern border of the state since the flooded conditions have recovered sufficiently to allow the lumbermen to operate. The market on all varieties of hardwoods has been strong and active, while the output of manufactured products in certain localities has been unusually large, especially in exports. Generally speaking the lumber market continues steady, with slight advance in some of the better grades. The demand for low grades and short lengths is also good at this time.

MILWAUKEE

While the local hardwood business is holding up well, it is evident that the sash and door, interior woodworking and other manufacturing concerns are inclined to buy only to satisfy their immediate wants. There seems to be a feeling in the trade that lower prices may be expected in a few weeks after the present shortage is relieved. Just at the present time, the new lumber which is arriving in the local market is green and out of condition and has to be put through the dry-kiln before it is ready for use. Shipments of new stock are confined largely to basswood, maple and a few grades of birch. The immediate wants of buyers, however, are taking all the hardwood on the market. There is plenty of activity in the building field and the consumption of hardwood is naturally large. Stocks in consumers' hands are so light that wholesalers say a continuation of the brisk business may be expected for some time to come.

Birch in both upper and lower-grade stuff is wanted, and stocks in this line are exceptionally low. Basswood, maple and poplar are other northern hardwoods which are in demand. Basswood is stronger and maple flooring is holding firm. Manufacturers and wholesalers say that there has not been a time when stocks in lower grade stuff have been so light as they are at the present time. Hardwood shipments from the South seem to be as light as ever, while the demand for both plain and quarter-sawed oak is brisk. It was expected that as soon as flood conditions in the South were improved, larger lumber arrivals might be expected.

DETROIT

Conditions in the Detroit hardwood market have been favorable the past two weeks and there has been an excellent demand, with prices remaining high and firm. The building boom has resulted in a strong demand for hardwoods of all kinds and all dealers have been busy. The demand for hemlock has been exceptionally brisk and many dealers have had difficulty in securing stocks enough to fill orders. The demand for oak and maple has also been exceptionally good. The flooring mills have been busy and report orders and inquiries plentiful. Brisk conditions also prevail in the box and veneer trades.

GLASGOW

Little alteration is to be reported in this district at this time, things remaining remarkably quiet. The first of the Montreal liners arrived last week, and the only thing in the shape of timber or boards was a small parcel of birch plank. This, however, is only what can yet be expected, because the demand for Canadian spruce and pine is nil, at least at present prices, and everything points to imports from Montreal being remakably light. Of birch logs it is reported that quite a quantity is still to come forward, on contract of course, and it is safe to say these will have to be stored, owing to the glutted condition in which the market finds itself. Riga spruce continues to come in, and this is why Canadian spruce is so much in the background. Small merchants can import Rigas in lots of say 10/30 standards on a separate bill of lading, and this being the case, they do not require to load themselves up with stock. As regards Quebec goods, the stock of waney timber does not warrant consignment, as quite a quantity of last year's import is still on hand, while the same remarks also apply to elm. Any consignment parcels of birch plank come to a very salable market.

The S. S. "Cassandra" arrived from Baltimore and Newport News with the usual assorted cargo of oak logs, planks and boards, walnut logs and lumber, while ash and hickory logs and lumber were also a conspicuous feature. The wagon oak trade is in a somewhat stagnant condition, there being no inquiries in the market, and shippers are advised to hold off for a little. Any over import will only tend to weaken prices.

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Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYES WANTED

WOODS AND MILL CREW

A double band mill in the Upper Peninsula of Michigan which has not been running for several years will be started this summer, cutting hardwood. Only part of mill and woods crew engaged. Permanent work all the year for the right men. State age, experience and wages. Address "BOX 60," care HARDWOOD RECORD.

WANTED—TWO HIGH-CLASS

Veneer saw filers. Position with high salary open for competent men; no other need apply. Correspondence solicited.

PUTNAM VENEER & LUMBER CO.,
Roachdale, Ind.

ONE HARDWOOD SALESMAN

Wanted for York state, one for Pennsylvania. State age, experience and salary expected. Address "BOX 62," care HARDWOOD RECORD.

WANTED

We have an opening for several first-class commission men to handle a high-grade line of wood mantels. State territory you have worked. Address "BOX 63," care HARDWOOD RECORD.

EMPLOYMENT WANTED

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St.,
Buffalo, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

TIMBER LANDS FOR SALE

I OWN 900 ACRES OF

hardwood timberland on Bear Island, one of the Apostle Group, in Chequamegon Bay, Lake Superior. This is estimated to cut better than 10 M to the acre, 60 per cent red and yellow birch. This timber can be logged cheaply and landed on three lines of railway at Ashland, Wis. Will sell timber or land and timber at a reasonable price. A small payment down to the right party will suffice. A. W. MACLEOD, Washburn, Wis.

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracts of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

LUMBER FOR SALE

WALNUT BOARD ENDS

We have a large accumulation of walnut board ends, squares, edgings and heavy slabs, suitable for small novelty turnings, or specialty work. Will sell cheap. Write us at once. Address

GEO. W. HARTZELL, Piqua, Ohio

FOR SALE

2 cars 4/4, 13" to 17" poplar boxboards.
1 car 4/4, 18" to 36" poplar panels and No. 1.
1 car 5/4 log run hickory.
1 car 6/4 & 8/4 log run hickory.

PEKIN HDWD. LBR. CO., Pekin, Ind.

DIMENSION STOCK WANTED

WANTED—BIRCH SQUARES

Quote cash price delivered Philadelphia on carload following sizes and approximate quantities. Squares not less than 30 inches. 2" squares, 50% carload; 1½" and 1¼", 12½% each; 1" squares, 25%. Also carload ¾" squares, plump.

IRWIN, 5113 Locust St., Philadelphia, Pa.

WANTED

DIMENSION OAK

Plain and Quartered

Various sizes for chair and table factories.
Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,
New York.

WANTED

Hard Maple and Beech Squares 42", 44", 48" long, plump 1" x 1". Must be clear and straight. If you have any to offer write us. Will take them dry or green.

THE COLUMBIA MFG. CO.,
New Philadelphia, Ohio.

LUMBER WANTED

LUMBER WANTED

Quote delivered Philadelphia, Pa., on
2 cars 8/4 sound wormy & 2 Com. Chestnut.
1 car 4/4 sound wormy & 2 Com. Chestnut.
1 car 6/4 No. 2 Common Poplar.
3 cars 4/4 Box White Pine.

Shipper to invoice direct. Name prices on any stock you desire to move.

CHARLES C. CROSS, Philadelphia, Pa.

WANTED FOR CASH

less 2% discount, 20 cars 3" Hard Maple, all grades, green or dry. Mill inspection if desired. Can also use some 6/4".

CYRUS C. SHAFER, South Bend, Ind.

WANTED

5 cars 4/4" 1sts & 2nds Brown Ash, Dry.
1 car 5/8" 1sts & 2nds Brown Ash, Dry.
1 car 8/4" 1sts & 2nds Brown Ash, Dry.
1 car 5/4" 1sts & 2nds Brown Ash, Dry.
Quote prices delivered Boston, Mass.

PLACE BROTHERS, INC.,
131 State Street, Boston, Mass.

WANTED

500,000 feet 4/4" sound wormy Chestnut, dry. Quote cash price Boston rate of freight. State when you could commence and complete shipment. Address, "BOX 37," care HARDWOOD RECORD.

TI MBERLANDS FOR SALE

FOR SALE

1,240 acres coal and timberland, 9,000,000 ft. oak, hickory, poplar and other timber; one-third of area underlaid with the Seewanee coal vein, four-fifths with two or more other veins. Price $15 per acre. H. C. SHUR, Duluth, Minn.

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FOR SALE—FINE 15,000

capacity sawmill, with 1,000,000 ft. standing timber. Steam and water power. Rigged for cutting hardwood dimension stock. Address

FRANK MILLER, Florence, Wis.

MISCELLANEOUS

FOR SALE

Would like to hear from parties wanting oak flooring and moulding. Address
"FLOORING," care HARDWOOD RECORD.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have wel-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address
"BOX 72," care HARDWOOD RECORD.

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2 18-ton Climax 3 ft. gauge locomotives;
One 6 ft. Smith, Myers & Schnier band mill;
One 75 ton H. P. Corliss engine.
J. H. NORTHRUP, Louisa, Ky.

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg., Chicago

VENEER MACHINE FOR SALE

One Coe 76-inch heavy rotary veneer machine, with knife grinder. Used less than 30 days.
W. C. P. & O. CO., Ottawa, Ill.

GANG RIP SAWS

One—30" American "Hoyt" Fig. 547 hardwood power-feed gang edger and ripper, complete with eight saws and countershaft, weight 4,100 lbs. Price f. o. b. Fort Wayne..$275.00
One—30" Berlin Machine Works No. 267 hardwood power-feed gang edger and ripper, complete with eight saws and counter-shaft. Price f. o. b. Fort Wayne.....$225.00
Both machines like new—no patched, worn or broken parts. Terms one-fourth with order, balance on delivery, subject to inspection.
ARCOLA STAVE CO.,
Fort Wayne, Ind.

Special Inducements TO Wood Working Plants

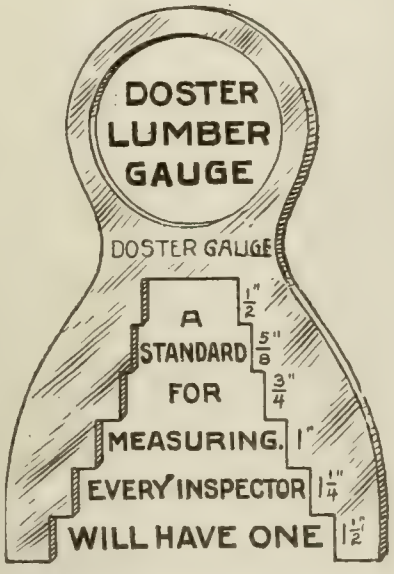
We know of several very desirable locations for Wood Working plants near to the country's greatest source of hard woods and where prices are the lowest in America.

Ample labor, low priced power and excellent transportation facilities go to make these openings very desirable.

Extra inducements as free sites, tax exemption or stock subscriptions will be given manufacturers of good faith and ability.

Our free services are at your command in aiding you to find a favorable location.

M. V. Richards
Land and Industrial Agt.
SOUTHERN RAILWAY
Room 305 Washington, D. C.



For sale by HARDWOOD RECORD,
537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

CHICAGO

E. H. KLANN LUMBER CO.

Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

819 FISHER BLDG. **HAR. 1187**

E. B. NETTLETON

Southern Hardwoods

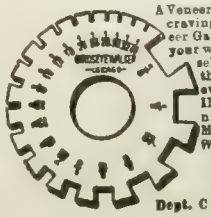
Pacific Coast Woods and Box Shooks
FISHER BUILDING CHICAGO

Osgood & Richardson

935 Peoples Gas Bldg.

NORTHERN AND SOUTHERN HARDWOODS

Chicago Agents: LAMB-FISH LUMBER CO.



A Veneer Gauge is the answer to a Veneer User's craving for years. This "Walker Brand" Veneer Gauge is a steel gauge that will satisfy your wants for all time. You can't do yourself a better turn than to buy one of these gauges. It gauges ACCURATELY every thickness from 1-40 inch to ⅝-inch INCLUSIVE. Wake up to this opportunity. Price only $1 98 delivered by U. S. Mail. Order now, today. Address—6456 Woodlawn Ave. Phone Hyde Park 88.

Dept. C **BIRD'S EYE WALKER** CHICAGO

COUNTERFEIT CHECKS

are frequent except where our

Two Piece Geometrical Barter Coin

is in use, then imitation isn't possible. Sample if you ask for it.

S. D. CHILDS & CO.
Chicago

We also make Time Checks, Stencils and Log Hammers.



WE WANT TO BUY

HARDWOODS OF ALL KINDS
FOR INTERIOR FINISH

No. 1 Oak Wagon Stock, Hickory and Maple Axles, Tongues, Reaches and Bolsters, Hickory and Oak Bending Stock, Etc.

ADDRESS DEPT. "L"

D. ACKLAND & SON, LTD., WINNIPEG, MAN., CANADA

Gerlach Modern Machines

COOPERAGE STOCK and BOX SHOOKS

Circular, Band and Cylinder Saws
SAW AND LOG TOOLS

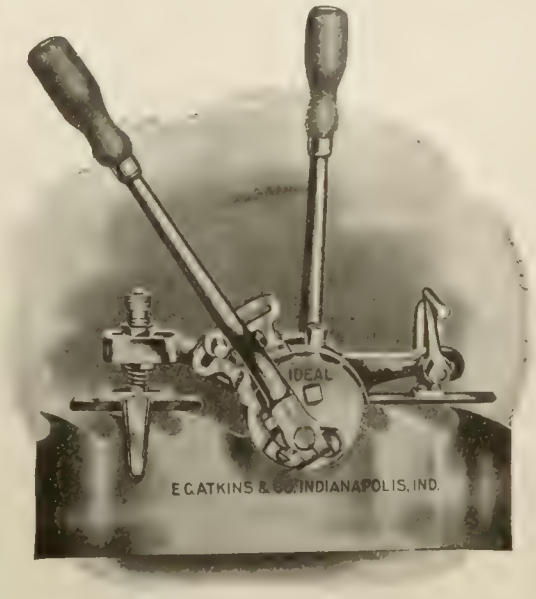
THE PETER GERLACH CO., Cleveland, Old City, U.S.A.

¶ The Gibson Aluminum Tally Book Cover and Tally Tickets are now employed by more than 2,000 lumber manufacturers, dealers and consumers.

ARE THE BEST TOOLS TOO GOOD FOR YOU?

In these days of High Tension, when everything about the mill gives way to **output**—the filer usually has his troubles. You know what he gets if his Saws are not in proper shape and ready on time.

You Can't Do The Best Work
Without The Best Tools



Atkins Ideal Swage

solves the problem. We have here a Swage which makes a perfect tooth, ready for shaping, and does it with less adjustment. It matters not what swage you are using or have used—you owe it to yourself to try ATKINS IDEAL. They are made for all purposes.

What do you think of a Swage that can be adjusted to swage any shape of tooth by merely moving the body of the swage **without changing the relation of the position of the block to the position of the die and anvil?**

No. 9 is our masterpiece. It is a light, strong, well constructed tool for swaging heavy bands, requiring extra deep gullet. This is evidently the Swage for which you have been looking so long.

No. 0 for Band Saws, 5/16 die, for [illegible] teeth 19 gauge and thinner	List	$37.50
No. OO for Band or Shingle Saws, 3/8 die, 3/8 depth, 16 to 19 gauge	List	**37.50**
No. 1 for Band and Gangs, 9/16 die, 9/16 depth, 13 to 16 gauge	List	37.50
No. 2 for Circular Saws, 5/8 die, 5/8 depth, 8 to 12 gauge	List	45.00
No. 3 for Circular Saws, 3/4 die, 3/4 depth, 6 to 10 gauge	List	52.50
No. 4 for Edger, Lath and Shingle Saws, 7/16 die, 7/16 depth, 14 to 19 Ga.	List	**37.50**
No. 5 for Band and Gang Saws, 5/8 die, 5/8 depth, 12 to 14 gauge	List	45.00
No. 6 for Heavy Duty Band Saws, 3/4 die, 3/4 depth, 11 to 14 gauge	List	**52.50**
No. 7 for Circular Saws, 9/16 die, 9/16 depth, 11 to 14 gauge	List	**37.50**
No. 8 for Cylinder Saws, 9/16 die, 9/16 depth, 11 to 16 gauge	List	**37.50**
No. 9 for Band Saws, 11/16 die, 11/16 depth, 12 to 15 gauge	List	45.00

The principal advantages lie in automatic features that are not found in others. It will cost you nothing to investigate, and—take our word for it—you will never regret doing so. Here is something different, and more improved than you could have possibly used.

SEND FOR OUR BOOK—"PERFECT SAW TEETH."

The Old Reliable Pribnow Shaper

Combine the Atkins Ideal Swage with the Pribnow Shaper and you may be sure that you have the very best tools in the world.



ATKINS SILVER STEEL SAWS

Remember that we are makers of a Perfect Saw for Every Purpose. Our Machine Knife Factory at Lancaster, N. Y., is the largest in the world.

E. C. ATKINS & CO., Inc.

The Silver Steel Saw People

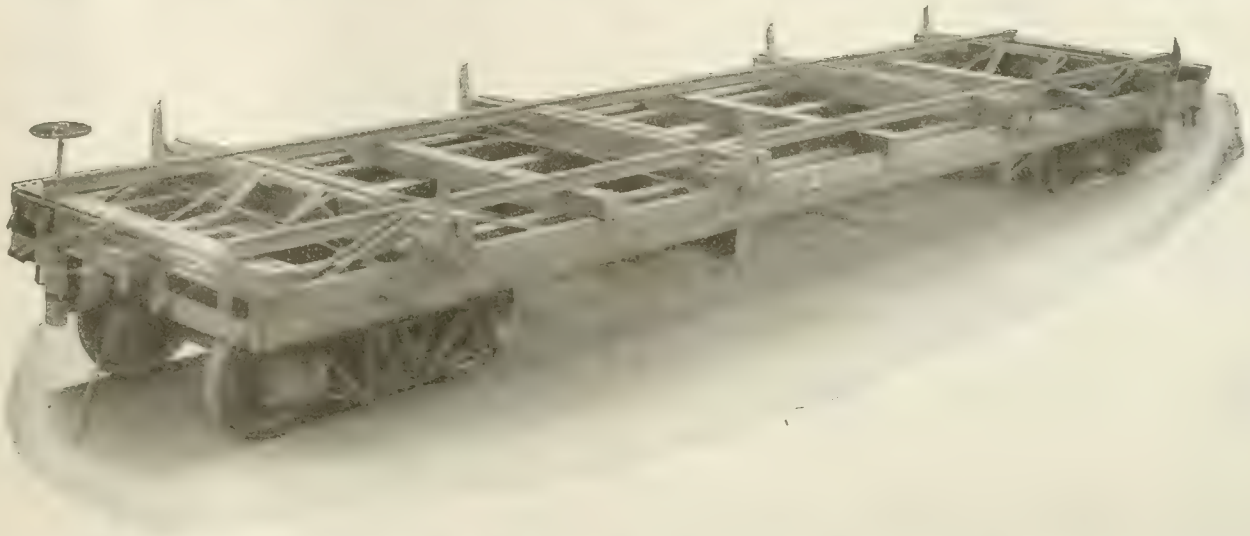
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Address E. C. ATKINS & CO. SEATTLE, VANCOUVER, B. C. SYDNEY, N. S. W.

RUSSEL LOGGING CARS

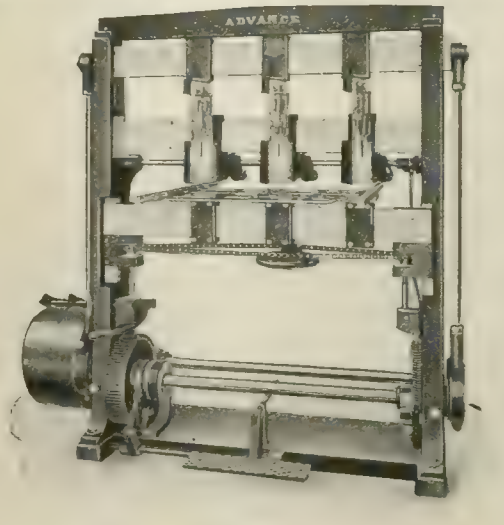


70,000 LBS. CAPACITY SKELETON TYPE RUSSEL CAR, EQUIPPED WITH LOADER RAILS AND RUSSEL PATENT DROP STAKES. THIS CAR COMPLIES WITH M. C. B. RULES AND SAFETY APPLIANCE ACTS.

Years of Hard Service Have Demonstrated Russel Cars to be Superior in Quality and Construction. Built for any Capacity Desired

RUSSEL WHEEL AND FOUNDRY CO. **DETROIT, MICHIGAN**

Wire Stitching Machinery



FOR

Crates, Veneer and Resawed Lumber Boxes, Also Wire and Metal Bound Boxes,

FRUIT PACKAGES, BASKETS, FIBER SHIPPING CASES, PAPER BOXES AND SPECIAL PURPOSES

ASK FOR CATALOGUE

Manufactured by

SARANAC MACHINE COMPANY

BENTON HARBOR, MICH., U. S. A.

Kiln Truck



We make all styles of Kiln Trucks, Transfer Cars. They are roller-bearing, steel or malleable iron wheels. We have one contract for 4,500 6½′ trucks.

Always a large stock of material on hand. Can make prompt shipment.

The National Dry Kiln Company

Indianapolis, Indiana



This New CLYDE Overhead Cableway Skidder Saves $74.67 a Day in Labor Alone!!

In an actual test recently conducted on the Smoky Mountains, it cost, on an average taken over three consecutive weeks, $14.75 for a day's labor with six men to get 25,725 feet of logs with this new CLYDE, while it cost $89.42 for three and a third days' labor with ten men to get 25,725 feet of logs with a big fifteen thousand dollar machine working under exactly the same conditions.

The difference is $74.67 a day in favor of the new CLYDE OVERHEAD — that's $23,371.71 a year, more than two and a half times the cost of this new machine for mountain logging.

Of course, the first cost of a CLYDE OVERHEAD SKIDDER is low, we admit that—it's less than two-thirds that of the machine it was tried out against.

Let us send you full details of this remarkable showing and of the machine that accomplished it!

CLYDE IRON WORKS

LARGEST MANUFACTURERS
of
PROVENLY EFFICIENT LOGGING MACHINERY IN THE WORLD

"A Machine for EVERY Logging Operation"

Home Office and Factory:
Duluth, Minn., U. S. A.

ELEPHANT RUBBER **BELTING**

AIR DRILL AND AIR TOOL **HOSE**

STEAM
WATER
SUCTION

EXTRA QUALITY

Recommended for hard service and guaranteed to do the work



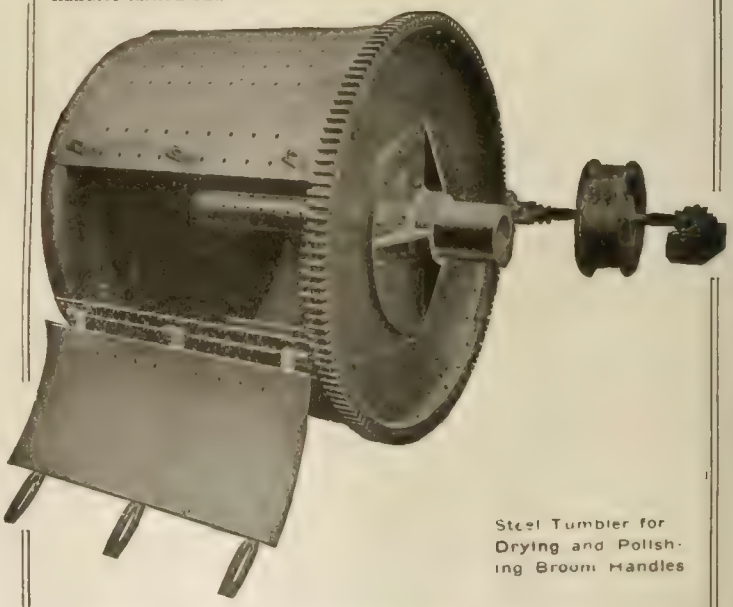
SELLING AGENTS
CRANE COMPANY - - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

THE MECHANICAL RUBBER COMPANY
(Chicago Rubber Works)

307 W. Randolph Street, CHICAGO
ESTABLISHED 1882

Broom Handle Machinery

Let us tell you about our **STEEL TUMBLERS FOR DRYING AND POLISHING BROOM HANDLES.** This system is rapidly supplanting all others. More economical; less time required for drying; no polishing afterwards; greater per cent of straight handles turned out.



Steel Tumbler for Drying and Polishing Broom Handles

CADILLAC MACHINE COMPANY
Complete Line of Broom Handle Machinery
CADILLAC, MICH.

Baldwin Geared Locomotives

are built for severe service on steep grades, sharp curves and uneven tracks.



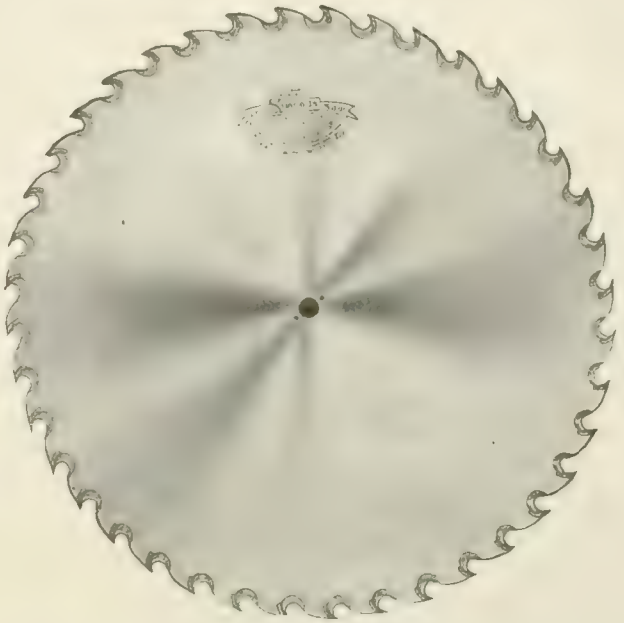
They are symmetrical in construction, with central drive and gears of selected material.

Further particulars will be gladly furnished on request

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Richmond, Va., Travelers Building.



"A satisfied customer is a good advertisement" is an old saying that is always new because it is always true. There are so many satisfied users of

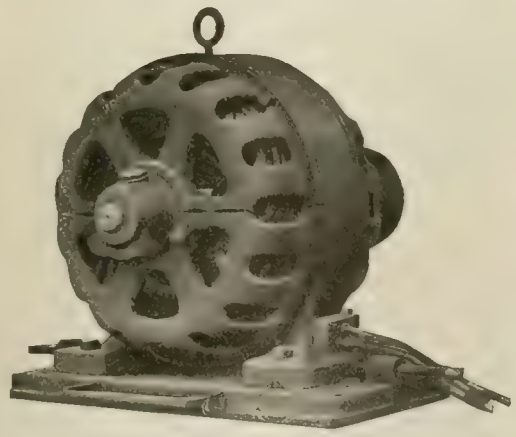
Simonds Inserted Tooth Saws

Do you want to be next? Write the nearest Simonds office for a quotation on that Saw you expect to buy.

Simonds Manufacturing Company

FITCHBURG, MASS. CHICAGO, ILL. MONTREAL, QUE.
NEW ORLEANS, LA. PORTLAND, ORE.

Westinghouse Motors form the Reliable Drive for Wood-Working Plants



AFTER Westinghouse motors are properly installed in a wood-working plant, the only attention they require is an occasional cleaning, inspection and lubrication. Beyond this, there is nothing to be done.

They are ready to start any moment they are wanted and they keep the machines they drive in continuous operation until the power is shut off. They are very rarely out of commission for repairs. Their life is very long; some of the first Westinghouse motors are still in successful operation.

Such reliability is the result of long experience in design, thorough study of operating conditions, and great care in manufacture. These factors combine to make Westinghouse motors more reliable than the service conditions, for which they are intended, require.

Of course, like any other machines, these motors must be properly installed. Westinghouse service takes care of this detail by giving full information on the installation of Westinghouse motors in any plant.

To receive full assurance of motor reliability, specify "Westinghouse Motors."

Westinghouse Electric & Mfg. Co., East Pittsburg, Pa.

Sales Offices in all Large Cities.

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

"SOVEMANCO."

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard. LOUISVILLE, KY. Mills, Magnolia, Standard and 21st Sts.

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co. *Wausau, Wis.*

Custom Mill Work, Storage, Inspection

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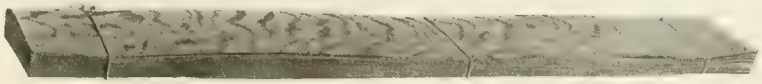
Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co. Long Island City, New York

VENEERS AND PANELS

OUR SPECIALTY
Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.
ROACHDALE, IND.
H. I. CUTSINGER, Gen'l Mgr.

B. C. JARRELL & CO.
MANUFACTURERS OF
High Grade, Rotary-Cut Gum
VENEERS
Cut right; dried right; prices right
HUMBOLDT, - TENNESSEE

Memphis Veneer & Lumber Co.
Memphis, Tenn.
Mahogany Veneer
1-8, 3-16 and 1-4-in. door stock.
1-20 and 1-16-in. sawed mahogany.

Sawed Veneer in the following
Quartered White Oak,
Quartered Red Oak,
Plain Red Oak,
Yellow Poplar,
White Ash and
Quartered Red Gum

Memphis Veneer & Lumber Company
Memphis, Tennessee

CIRCASSIAN MAHOGANY
Logs VENEERS Lumber
WE IMPORT WE MANUFACTURE
All Thicknesses of Mahogany
Ready for Shipment
RICE VENEER & LUMBER CO.
GRAND RAPIDS, MICH.

Hoffman Brothers Company
Sliced and Sawed, Quartered and Plain Red and White Oak
Walnut Cherry Ash Maple
Let us Send You Our Stock List FORT WAYNE, IND.

The Central Veneer Co.
SOFT YELLOW POPLAR
CROSS BANDING
Huntington, West Virginia

WISCONSIN

WHERE THE FINEST NORTHERN HARDWOODS GROW

Scott & Howe Lumber Co. **Medford Lumber Co.**

NELS DUEHOLM, Sales Manager

Old National Bank Building **OSHKOSH, WISCONSIN**

WE HAVE ON HAND

5,500,000 4/4 & THICKER BIRCH

2,600,000 4/4 & THICKER HARD MAPLE

CUT OUT OF THE FINEST LOT OF LOGS IN THE NORTHWEST. MANUFACTURERS OF LUMBER SHOULD TRY A SAMPLE CAR AND YOU WILL ALWAYS BE OUR CUSTOMER

WE MANUFACTURE MICHIGAN HARDWOODS AND HEMLOCK. MILLS ELECTRICALLY DRIVEN; STOCK BAND SAWN

Have in Shipping Condition

4/4, 5/4, 6/4 and 8/4 BIRCH also a good stock of Hemlock Dimension & Tamarack Bridge Plank

WILL BE PLEASED TO QUOTE PRICES ON APPLICATION

THE C. A. GOODYEAR LUMBER COMPANY

Office and Mill at TOMAH, WISCONSIN

Logging Camp BLUE BILL, MICHIGAN

SAVE YOUR MONEY BY USING THE

RED BOOK Published Semi-annually in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the **United States, Alberta, Manitoba and Saskatchewan.** The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St. CHICAGO

Mention This Paper.

116 Nassau Street NEW YORK CITY

If You Knew

What our BULLETIN SERVICE was doing for your competitor in the lumber business, you'd not only want the service yourself, but YOU'D HAVE IT.

Let Us Tell You About It.

Hardwood Record :: Chicago

89%

of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

ESTABLISHED 1869

Adams & Raymond Veneer Co.

INDIANAPOLIS, INDIANA

MANUFACTURERS OF PLAIN & FIGURED VENEERS

CIRCASSIAN / AMERICAN WALNUT

QUARTERED OAK

ANY WOOD

ANY THICKNESS

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

Baker-Matthews Manufacturing Co.
Sikeston, Mo.
Band Sawn Southern Hardwoods
SPECIALTIES
RED GUM, PLAIN OAK
SEND US YOUR INQUIRIES

GARETSON-GREASON LUMBER CO.
1002-1005 Times Bldg. ST. LOUIS
MANUFACTURERS
Three Mills

Frank Purcell Kansas City U. S. A.
Exporter of Black Walnut Logs
JO MARK
FIGURED WALNUT IN LONG WOOD AND STUMPS

Salt Lick Lumber Co.
SALT LICK . . . . KENTUCKY
MANUFACTURERS OF
Eureka OAK AND BEECH **Oak Flooring**
Complete stock of 3/8" and 13/16" in all standard widths

Carolina Spruce Co.
MANUFACTURERS
Spruce & Hardwood
LUMBER
Mills: Pensacola, N. C. *Capacity* 90,000 ft. per day
Charles K. Parry & Co. Sole Selling Agts. Land Title Bldg. Philadelphia

Louisiana Long Leaf Lumber Co.
Fisher, Louisiana
Diamond 4L Co. Brand
OAK FLOORING
A GUARANTEE OF PERFECTION

Boice Lumber Co., Inc.
Southern Hardwoods
MAIN OFFICE
RICHMOND, VIRGINIA
Yards: NORFOLK, ABINGDON, GRAHAM, VA., and NORTH WILKESBORO, N. C.

Our Corps of Inspectors
Intelligent! Highly Trained!
Conscientious!
Is assurance that you will get what your order calls for when you buy Gum from us.
Himmelberger-Harrison Lumber Company
Cape Girardeau, Missouri

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - WELLS, MICHIGAN

Von Platen Lumber Co.

Iron Mountain, Michigan

MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

100 M Ft. 4/4 No. 1 and 2 Common Birch.
50 M Ft. 5/4 No. 1 Common Birch.
50 M Ft. 5/4 No. 2 Common Birch.
100 M Ft. 5/4 No. 1 and 2 Common Maple.
100 M Ft. 6/4 No. 1 and 2 Common Maple.

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

"Chief Brand" Maple and Beech Flooring

in 3/8, 5/8 and 13-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

For the Better Kind of Hardwoods

write

EAST JORDAN LUMBER CO.

East Jordan, Mich.

ALL THE MICHIGAN HARDWOODS

Makers of

Imperial Brand

LATH SHINGLES — MAPLE FLOORING — PINE AND HEMLOCK

FORMAN'S FAMOUS OAK FLOORING

Is made in faultless fashion from the most uniform-colored and even-textured oak produced; worked from Kraetzer-Cured lumber manufactured at our Heidelberg, Ky., sawmills.

Thomas Forman Company

Detroit : : : : : Michigan

For Prompt Shipment

Basswood—100,000 ft. 5/4 No. 2 Common & Better.
Soft Maple—25,000 ft. 4/4 & 8/4 Log Run M. C. O.
White & Red Oak—12,000 ft. Log Run M. C. O.
Black Walnut—3,000 ft. Log Run M. C. O.

STRUTHERS COOPERAGE CO., Romeo, Michigan

S. L. EASTMAN FLOORING CO.

SAGINAW BRAND

MAPLE FLOORING

SAGINAW, MICH.

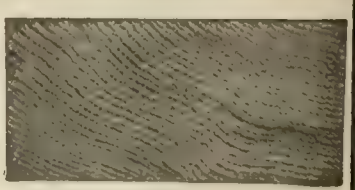


Lumber Dried As Never Before

SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN

GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN



BUFFALO

The Foremost Hardwood Market of the East

I. N. Stewart & Bro.
Specialties
Cherry and Oak
892 Elk Street

Standard Hardwood Lumber Co.
OAK, ASH and CHESTNUT
1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.
We want to buy for cash
OAK, ASH AND OTHER HARDWOODS
All grades and thicknesses.
Will receive and inspect stock at shipping point Branch yard, Memphis, Tenn.
940 Seneca Street, BUFFALO

Hugh McLean Lumber Co.
OUR SPECIALTY:
QUARTERED WHITE OAK
940 ELK STREET

T. SULLIVAN & CO.
SPECIALTIES:
Gray Elm, Brown Ash
Pacific Coast Fir and Spruce
2 ARTHUR STREET

ORSON E. YEAGER
SPECIALTIES:
Oak, Ash and Poplar
932 ELK STREET

ANTHONY MILLER
HARDWOODS OF ALL KINDS
893 EAGLE STREET

G. ELIAS & BRO.
HARDWOODS
White Pine, Yellow Pine, Spruce, Hemlock, Fir, Lumber, Timber, Millwork, Boxes, Maple and Oak Flooring
955-1015 ELK STREET

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant, Kitchen & Company

Manufacturers Old-Fashioned Soft Yellow Poplar

5-8 and 4-4 in Wide Stock, Specialty

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

YOU pay a *little* more for our hardwood lumber than you do for many others', but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer, let's get acquainted.

LITTLE RIVER LUMBER COMPANY **Townsend, Tenn.**

W. H. White Company
Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.
Sales Office: BUFFALO, N. Y.

STOCK DRY—STANDARD GRADES—BEST MANUFACTURE—CAR OR CARGO SHIPMENTS

WE OFFER
All Kinds
OF
Hardwood and Hemlock
Lumber
Hardwood
Flooring, Lath
AND
Dimension Stock

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED
POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD

SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Hardwood Record

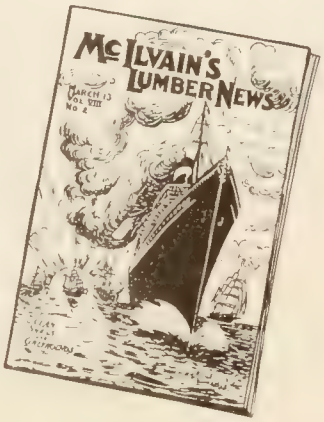
Eighteenth Year, Semi-Monthly.

CHICAGO, JUNE 25, 1913

Subscription $2. Single Copies, 10 Cents.



ADVERTISERS' CLASSIFIED DIRECTORY FOLLOWS READING MATTER.



¶ When we say every month that we are always glad to be tested on rush orders, we mean just this, exactly.

¶ Never hesitate to call on us when you want the goods in a hurry.

¶ Prompt delivery is the "McIlvain Way."

Look over this month's "Lumber News"—If it is not on your desk, drop us a postal—it will be sent by return mail.

J. GIBSON McILVAIN & CO.

1420 Chestnut Street **Philadelphia, Pa.**

Cartier-Holland Lumber Company

TAKE NOTICE!

In the last three issues, we offered high grade **End Dried White Maple.** We now have left only 50,000′ of 1″, the balance of the stock having all been sold. Better take the matter up with us at once.

We also have the following items for shipment in July.

50,000′ 5/4 High Grade Common & Better Birch.

50,000′ 4/4 High Grade Common & Better Birch.

31,000′ 8/4 No. 1 Common & Better Cross Piled Sap Maple.

YOUR INQUIRIES WILL BE APPRECIATED

Ludington Michigan

ELEPHANT RUBBER **BELTING**

AIR DRILL AND AIR TOOL **HOSE**

STEAM
WATER
SUCTION

EXTRA QUALITY

Recommended for hard service and guaranteed to do the work



SELLING AGENTS

CRANE COMPANY - - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

THE MECHANICAL RUBBER COMPANY

(Chicago Rubber Works)

307 W. Randolph Street, CHICAGO

ESTABLISHED 1882

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

BASSWOOD

We Offer for Prompt Shipment

150,000 Feet

Dry 1 x 7 and wider Basswood Firsts and Seconds. Run about 75% clear, the defects are small and the stock is very bright and nice.

ESTIMATED WIDTHS

7 and 8 inch	34%
9 and 10 inch	35%
11 and 12 inch	27%
Wider than 12 inch	4%

ESTIMATED LENGTHS

6 and 8 feet	8%
10 and 12 feet	20%
14 feet	20%
16 feet	49%
Odd lengths	3%

June 25, 1913

COBBS & MITCHELL, Inc.

Sales Department

CADILLAC MICH.

Mitchell Brothers Co.

Dry Stock List

MICHIGAN HARDWOODS

Cadillac, Mich. **June 12, 1913**

1x4 Basswood, No. 1 Common, 11 M.
1x7 & up Basswood, No. 1 Common (Part Dry), 18 M.
4/4 Cadillac Gray Elm, 1s & 2s, 94 M.
4/4 Cadillac Gray Elm, No. 1 Common, 76 M.
4/4 Cadillac Gray Elm, No. 2 Common, 66 M.
4/4 Cadillac Gray Elm, No. 3 Common, 65 M.
4/4 Rock Elm, No. 2 Common & Better, 7 M.
4/4 Soft Maple, No. 2 Common & Better, 9 M.
4/4 White Maple, End Dried (Clear), 14 M.
5/4 White Maple, End Dried (Clear), 3 M.
4/4 Birdseye Maple, 1s & 2s, End Dried, 1½ M.
4/4 White Pine, No. 3 Common, 20 M.

CADILLAC QUALITY

When you want lumber of Cadillac Quality, Lumber which has been manufactured and seasoned properly, and grades which have not been blended to meet price competition—send us your inquiries.

WE SELL ONLY MITCHELL'S MAKE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

100,000 ft. 5/4 1st & 2nds Basswood

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



Ready for Shipment About June 1st

Ten cars
4/4 No. 1 Common & Better Birch

Five cars
6/4 No. 1 Common & Better Birch

Two cars
8/4 No. 1 Common & Better Birch

Two cars
4/4 No. 2 Common & Better Ash

Five cars
4/4 No. 2 Common S. Elm

Five cars
4/4 No. 2 Com. & Better Basswood

Above cut from virgin timber. Grade and manufacture are first class.

Mears - Slayton Lumber Co.
1237 Belmont Ave. Chicago, Ill.

15,000,000 FEET ALWAYS ON HAND



THE PRICE-BUYER'S EAR

is reached by only one line of argument, but Quality saves waste and swells his dividends.

WE SPECIALIZE ON QUALITY

From our regular stock of Southern Hardwoods we make a special offer of the following

"WISLUMBCO STANDARDS"

50,000 ft. 4 4x18" and wider No. 1 and Panel Cottonwood.
60,000 ft. 4 4 Shop Cypress.
50,000 ft. 4 4 No. 1 Common Cypress.
75,000 ft. 4 4x13 to 17" Box Board Tupelo.
90,000 ft. 4/4 1st and 2nd Tupelo.
60,000 ft. 4/4 1st and 2nd Red Gum.
80,000 ft. 4 4 No. 1 Common Red Gum.
75,000 ft. 4/4x13" and wider 1st and 2nd Sap Gum.

SEND US YOUR INQUIRIES FOR SOUTHERN HARDWOODS

WISCONSIN LUMBER CO.
CHICAGO

Band Mills
HUTTIG, ARK.
DEERING, MO.

SAVE YOUR MONEY BY USING THE

RED BOOK Published Semi-annually in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the **United States, Alberta, Manitoba and Saskatchewan.** The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. **Write for terms.**

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608 So. Dearborn St. CHICAGO

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Hayden & Westcott Lumber Co.
SPECIAL RAILROAD DEPT.
Hardwoods :: Softwoods
823 Railway Exchange Building, Chicago, Ill.

For items of Hardwood Stock or Hardwood Machinery, you will find it advantageous to write our advertisers. Get in touch!

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

VENEER BUYERS When in Chicago take a few minutes' time to look over the line of

CIRCASSIAN
AND
MAHOGANY

—OFFERED BY—

R. S. BACON VENEER COMPANY

TEN TO FIFTEEN MINUTES' RIDE FROM ANY DOWNTOWN HOTEL OR RAILROAD STATION. TAKE OAK PARK ELEVATED TO ANN STREET STATION

¶ We can offer selection from nearly two million feet of choice Circassian—one of the largest lines in the United States.

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTHWEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry

Room 1003 Harris Trust Bldg., Chicago, Illinois

J. RAYNER

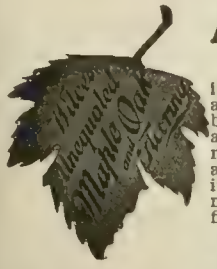
VENEERED PANELS

ALL WOODS

SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.
CHICAGO



A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

Estabrook-Skeele Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash

And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, . . . CHICAGO

'PHONE HARRISON 1984

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD CHICAGO

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO.

KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK

OUR SPECIALTY

MANUFACTURERS OF

QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER

BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER, Pres. — J. M. LOGAN, Gen'l Manager

C. C. CANNON, Vice-Pres. — C. B. SWANN, Sec'y and Treas.

J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS

HARDWOODS AND PINE

POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:
Bank and McLean Ave., Cincinnati — I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:

WHITE OAK—Plain or Quartered.
RED OAK—Plain or Quartered.
CHESTNUT — BASSWOOD
POPLAR — WHITE PINE

Always carry large well assorted stock of all kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR, OAK, CHESTNUT, WHITE AND YELLOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

Kimball & Kopcke

Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

"THE VERY BEST"

Red Birch

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

CINCINNATI
THE GATEWAY OF THE SOUTH

Lest You Forget
and
You probably don't know that we are now
Manufacturing in White and Red Plain and Quarter-Sawed **OAK**
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FAS. Qrtd. White Oak 10" up	....	....	....	....	12,000	....	....	....	....	....
No. 1 Com. Qrtd. White Oak	....	....	....	20,000	150,000	....	....	....	....	....
No. 2 Com. Qrtd. White Oak	....	....	....	....	12,000	....	....	....	....	....
FAS. Plain White Oak	....	....	....	....	50,000	....	20,000	....	....	2,000
No. 1 C. Plain White Oak	....	....	25,000	20,000	200,000	12,000	20,000	....	....	....
FAS. Plain White Oak, 10" up	....	....	....	4,000	....	....	....	....	....	....
FAS. Plain Red Oak	....	....	....	....	100,000	....	....	20,000	....	1,000
No. 1 C. Plain Red Oak	....	....	20,000	15,000	130,000	....	....	....	....	....
C. & B. Qrtd. Red Gum	....	....	....	....	25,000	....	....	1,000	....	....
FAS. Circassian Red Gum	25,000	25,000	12,000	30,000	30,000	3,000	4,000	6,000	....	....
FAS. Plain Red Gum	500,000	400,000	40,000	400,000	600 000	100,000	75,000	60,000	3,000	....
No. 1 C. Plain Red Gum	....	....	....	75,000	300,000	60,000	....	....	....	....
FAS. Sap Gum, 13"-16"	....	....	....	....	60,000	....	....	....	....	....
FAS. Sap Gum, 18" up	....	....	....	....	15,000	....	....	....	....	....
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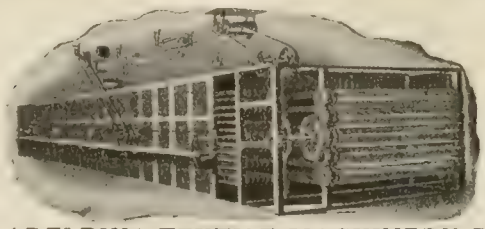
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Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-Working Machinery, on the 10th and 25th of each Month, by

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Hu Maxwell }

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537 So. Dearborn Street, CHICAGO
Telephones: Harrison 8086-8087-8088

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Review and Outlook

General Market Conditions

WHILE THE MOST NOTABLE FEATURE of the general trade during the past few weeks has been the apparent falling off in demand, there is no serious marked uneasiness as to the ultimate outcome inasmuch as the stock situation in hardwoods throughout the country continues to show the smallest accumulation of hardwoods in the history of the hardwood business. While there is naturally some easing in prices on certain stocks, this situation is not the direct result of a natural laxity in demand alone, but the effects of conditions noted before in this report are still being felt.

The heavy transit shipments, immediately before and during the recent floods, the main effect of which was felt in the Chicago and surrounding markets most noticeably, are still having some bearing on trade in general, inasmuch as some very good "buys" were made at that time by large consumers. In addition quite a number of the consuming trade with available resources sufficient to enable them to purchase stock ahead of requirements, anticipated a shortage of hardwoods at mill points sometime ago and placed orders at that time for future delivery. As a result these people are at the present time practically out of the market. This condition, however, is limited to a comparatively small number of concerns.

In addition some of the large consuming factories are now busy with mid-season inventories, which naturally takes them out of the purchasing field for a short time, at least. These factors, in addition to the to-be-expected effect of present season on business, are responsible for the easing off in demand.

There is, of course, to be considered the disposition of buyers to continue to hold out for lower prices, but it is still safe to predict that they will for the most part be disappointed. The general caution which business men are showing in all lines at present on account of the old tariff bugaboo, and furthermore the tightness of money which has not enabled big concerns to borrow sufficient capital at reasonable rates, also had some bearing on the general situation.

In the building end of the consuming trade as well as in certain other industrial lines of the consuming element, serious strike disturbances have had considerable bearing on business conditions. These disturbances have in the most part been settled in the eastern territory, but just now the wholesale lockout in Chicago is having a decided effect on demand in the Chicago market. Inasmuch as the outcome of this controversy is very far from being certain, there is considerable hesitancy shown on the part of those handling woods to the builders. They are loath to stock up with an undue amount of lumber until the situation has been definitely decided.

As stated above mill stocks are exceedingly low; in fact the only producing section which can be said to be shipping any amount of lumber is the manufacturing belt in the northern states. Considerable shipments of hardwood and hemlock have come in from northern manufacturers, mostly by water, and these shipments have had some effect on the local Chicago market. Generally speaking, however, the actual stock situation is a strong factor tending to hold the market at present firm values.

The general slump in yellow pine, which is probably most in effect on a limited amount of transit stock, of course, has had some effect on hemlock, and has actually put hemlock values off noticeably, inasmuch as the difference in prices in the two woods was not commensurate with their relative values. In hardwoods, however, while some local prices are made which have not been entirely satisfactory, as a general thing the price feature is strong. It is helped by the excellent export business, which is continuing both from southern and eastern ports.

Definite statements of representative buyers make it certain that the middle of summer will see trade accelerate to a remarkable extent.

Undisturbed Forest

THE COVER PICTURE which illustrates this issue of HARDWOOD RECORD shows a forest scene which has never been disturbed by the hand of man. No one single feature strikes the attention. The river in the center flows rapidly, but the water is unbroken; the stream's banks are lined with dense forest, but so solid are the walls of foliage that scarcely one tree can be distinguished from another. The scene is situated in Oconee county, South Carolina, and the name of the stream could almost be guessed—Whitewater river. The water could scarcely be any color but white flowing as it does through a region where the soil is so completely covered by vegetation that little sediment ever finds its way into the stream. The forest which covers such a landscape is at rest. It grows just as fast as it decays, and if left to nature little change will occur from century to century. A river situated as that one is not subject to sudden or extreme fluctuations. It is seldom very high or very low. The thousands of springs that feed it are always nearly the same because the foliage and roots of trees form a storehouse for water and pay it out as the streams need it. Most of the forested parts of America were once like the scene presented in the picture, but such scenes are rare now. Ax and fire have been nearly everywhere, and when they got in the work which is supposed to acompany civilization, a good deal of nature's

beauty was lost. The time has now come when a bit of creation as nature made it is a somewhat rare sight, and such will become a rarer sight from year to year.

Supreme Court Decisions Give Promise of Even Greater Turmoil in Rate Controversies

ON MONDAY, JUNE 9, THE SUPREME COURT of the United States, the final tribunal in all litigation, handed down a decision which is momentous in its significance, and which further promises to open up in the incessant controversy between shippers and transportation companies a vastly greater opportunity for misunderstanding. The decision was rendered in the so-called Minnesota rate case and the opinion was prepared by Justice Hughes. It promises to very considerably complicate the equitable adjustment of freight rates all over the country.

The gist of the decision is that in the absence of explicit action by Congress, the various states in the Union are empowered to fix rates on intra-state traffic regardless of what the interstate rates through each particular state may be, or the effect of the intra-state rates on the interstate rates. Of course the opinion provides that no intra-state rates may be confiscatory, but under this provision the railroad commissioners of the various states or the state legislatures are given authority to make all rates on commerce within the boundaries of their states.

The railroads' contention regarding the Minnesota rate case has been that the Interstate Commerce Commission should logically control the various local and intra-state rates as well as the rates on long hauls between states. While on the face of it, this contention seems entirely just and really the only logical way of arriving at any satisfactory arrangement, still from a legal point of view, the controversy is ultimately on the status laid down in the Supreme Court's opinion or that opinion would not have been returned. At the same time it is appalling to think of the probable confusion and the very maelstrom of controversy in which it may result.

As suggested directly in the opinion, the only remedy is that Congress immediately pass legislation which shall give the Interstate Commerce Commission direct supervision over all rates throughout the states and nation. Favorable action on this vastly important question will remove a very probable cause of still further inconvenience to business.

Following the Minnesota rate decision, the Supreme Court on June 16 returned a decision upholding state railroad legislation in Missouri, Arkansas, Oregon and West Virginia. This legislation included two-cent passenger laws in Missouri, Arkansas and West Virginia; maximum freight rate laws in Missouri and Arkansas, and freight rates out of Portland in the Oregon case.

Justice Hughes, who announced this decision, as he did in the Minnesota case, cited frequently the precedents established by that case rather than reviewing in full the arguments on the new decision, which were analogous to those on which the Minnesota rate decision was based.

The New Currency Bill

THE ADMINISTRATION CURRENCY BILL as a substitute for the Aldrich currency reform measure, which has been given considerable advance publicity, is now before the House and Senate at Washington, following its reading on Monday before the two branches of Congress assembled in general session, by President Wilson. The proposed measure is similar to that advocated in the National Monetary Commission bill, known generally as the "Aldrich bill," but in the actual application the measures vary widely. As an instance, the Aldrich bill proposed that there should be a central bank with forty-five directors. These should be elected by the various banks in each district and these directors in turn would elect one governor.

As compared with this the administration measure proposes to give the government absolute control of the situation; to create a national reserve board consisting of nine members, three elected by the banks' electorate, three appointed by the President and three as ex-officio members of the board. The latter three would be the secretaries of the treasury, agriculture and commerce.

The administration measure does not create a central reserve bank, but rather provides for reserve districts to be organized by a committee consisting of the treasurer, comptroller of currency and attorney-general. There will be at least twelve of these reserve districts, and each will have a central reserve bank incorporated under federal laws. All national banks in each district must subscribe to the capital stock of the reserve bank in its district. This provision is not compulsory with trust companies, state banks and other banking institutions. Each bank must subscribe to the extent of twenty per cent of its unimpaired capital stock.

The only deposits in the reserve bank are those of the individual banks holding this stock and of the federal government. A credit balance in the reserve bank must be maintained at all times by home banks, equal to three per cent of their current demand liabilities. The government funds deposited in such banks may draw interest, but the deposits from affiliated banks will not, but the depositors may receive five per cent dividends on stocks. Above five per cent, all profits will be turned over to the accumulation of a reserve surplus, up to twenty per cent of the capital stock of the reserve bank, and beyond this such funds shall be turned over to the federal treasury.

Each reserve bank must have a capital stock of at least $5,000,000. It is given the privilege of operating branches, but in no case can any bank have more than one branch for each $500,000 of its capital stock.

As to the actual operation, it is notable that the reserve banks are prohibited from loaning for speculative purposes. It is not anticipated that there will be any competition between the reserve banks and their home banks in the matter of purchasing commercial paper and the like.

The national treasurer is also authorized to issue notes to the extent of $500,000 for the purpose of reducing the amount of national bank notes outstanding. These notes are to be issued to reserve banks on application approved by proper officials. The reserve bank may at any time, by turning over national treasury circulating notes, reduce its account and withdraw its collateral in proportion. The collateral to be deposited with the treasury is to be equivalent to the circulating notes which it secures, and each reserve bank is required to keep in its reserve banks thirty-three-and-a-half per cent of the amount of such notes deposited through it. This reserve will be decreased as the notes are returned, which provides the so-called "elastic" feature of the bill.

As to intercourse between the various district reserve banks, each is given the privilege of rediscounting for any other, upon obtaining permission of the national reserve board. In addition the national reserve board will maintain a national clearing house for the reserve banks. Each reserve bank will be required to clear for its district. Various other minor features also are provided.

Will Standardize Railroad Scales

THE BUREAU OF STANDARDS of the Public Service at Washington, that has been in existence for a good many years without doing anything to attract particular attention, is now being brought into the limelight of government activity. Secretary Redfield of the Department of Commerce can be said to have discovered this bureau. The idea which he follows out is that the Bureau of Standards is in a proper position to co-operate with various other bureaus and departments of the federal government. The latest task planned for the bureau is an inspection of the railroad scales used on the railroads of the country that are doing an interstate business. In making this inspection, the bureau will supplement or lead an investigation that is now being made by the Interstate Commerce Commission in freight weighing by railroads.

This work, as recorded in the lumber press for some time, has been carried on unostentatiously by the commerce commission, being undertaken in response to complaints from a large number of shippers, which have been coming in for years.

The Department of Commerce has taken the matter up for the

specific purpose of inspecting all railroad scales throughout the country. The matter was brought to the attention of the Department through the Interstate Commerce Commission investigation, that commission having called attention to the fact that the railroads annually collected about $2,200,000,000 from shippers all over the country on scales which belong to and are operated entirely by the railroads.

Inasmuch as Congress at the last session gave the Bureau of Standards $25,000 for the purchase of a test weight car equipment, it seems highly probable that the matter will be worked out to the entire satisfaction of the shipping element. It is anticipated that this car will be delivered by July 1. The equipment is different from any heretofore used, being designed to give greater accuracy in results. The tests will begin on the eastern railroads and the car will gradually work its way west, probably arriving in the Illinois territory in the early fall. It is anticipated that the announcement of these proposed tests by the government will result in a great many of the railroads examining their own scales without delay. Hence the moral effect of the government's decision seems likely to be wholesome.

It has never been claimed that railroads intentionally maintained incorrect scales, but it is a well-known fact that scales are incorrect and it is pretty generally conceded that it is merely due to carelessness. The new bureau, equipped as it is with facilities and authority, puts the question of freight weighing on an entirely satisfactory basis.

Estimate of Lumber Consumed Annually by Railroads

WHILE THE FOREST SERVICE and other government departments have collected some mighty valuable information showing consumption of various raw materials in different industries, so far they have not compiled statistics in any way indicating the total consumption of all lumber in the United States by the various railroad systems. Nor are there statistics compiled by any organization or individual showing specifically the vast consumption of forest products by this important branch of the consuming trade.

This question was recently put to HARDWOOD RECORD. Being totally impossible to locate specific statistics, it became necessary to make an estimate based on reasonably accurate figures of the various railroads in conjunction with the per cent of mileage represented by those roads. Representative lines in all parts of the country were taken, each line being fairly typical of some section of the United States.

The total mileage of these eight roads was 51,567 miles, and showed an approximate average consumption of 7,600 feet per mile for all purposes exclusive of ties, poles and piling. On that basis the total of the United States would be 1,854,400,000 feet.

The estimates of woods used in car building by railroads and other companies building cars for railroads, based on statistics for thirteen states, indicate a total for the United States of 1,800,000,000 feet.

The annual board feet consumption of ties, based on thirty-two board feet for each tie, was 4,404,680,000 feet, while poles used by steam roads annually are estimated to contain 70,000,000 feet board measure. Thus the total consumption of all kinds of woods would be 8,139,080,000 feet, which does not include piling.

There may be considerable duplication in the figures showing "lumber" and "car building," but it is not known how much duplication there is. As a rule railroads buy their cars from car building companies, in which case there is little or no duplication.

It might be interesting to note that the total number of cars in use in the United States on steam roads is 2,408,580, and that the total mileage in 1911 was 244,089 miles.

Car Statistics

THE REGULAR STATEMENT OF CAR SURPLUSES and shortages as compiled by the American Railway Association shows a considerable increase in surplus from May 31 to June 14, without a correspondingly increased shortage between those two dates.

The figures show that on May 31 the total surplus was 60,291 cars, as against 71,126 cars on June 14. The shortage, on the other hand, was 7,199 cars on June 14, as against 9,383 cars on May 31. This would indicate that the reported laxity in trade in various lines during the past couple of weeks has been concrete rather than mythical.

In addition figures for June 20 a year ago show very much the same as figures for this year.

The Need of Forestry in Tropical America

IT IS VERY MUCH TO BE HOPED that a scientific investigation of the tropical American forests will be made under the direction of technical foresters who have a good knowledge of forest conditions and the timber. It is certain that much valuable information would be obtained from a study of this nature. A great deal of American capital is now used in various parts of Mexico and Central America in exploiting the timber and in supplying a want in this country. The best timber is now being cut, and this material, although apparently inexhaustible, is speedily diminishing. It is very important that the cutting be carried out upon some regular system, which will permit the young trees to grow up and replace those cut down, which is the first principle in rational forestry and conservation.

The exploitation of timber in tropical America is even more wasteful than it was in this country in the past, for the reason that the concessionist has absolutely no interest in the future growth of timber on the cut-over areas. It is almost as vital to the people of the United States to have the timber preserved in the territory lying just south of her as within her own limits, for she has been drawing timber from these virgin forests for more than two hundred years and will be obliged to depend upon them for all time to come. The population is constantly increasing and the native forest resources are rapidly diminishing. We depend on tropical America for kinds of timber we cannot grow in this country. Mahogany, cedar, lignum-vitæ, ebony, fustic, logwood and rosewood are a few of the woods which are essential to American wood users, and it is important that a constant supply is made available. These are a few of the standard kinds that have been exploited for many years and brought to this country. While the United States cannot take steps to practice forestry in regions outside of its own domain, it does seem proper to offer technical aid or advice to the respective countries from which it now draws forest products, and to superintend the felling and logging in order that these two operations may be carried out in the least wasteful manner.

The logging season is short in many parts and men are required to cut the largest amount of wood in the shortest possible time. The men have no idea of the value of the trees they are cutting or of their associated species. The forests which are nearest to the water courses and easiest to cut are repeatedly culled, taking out the best timber and allowing the inferior species to occupy their places. Should this practice be continued, it is certain that in the next two decades the forests will greatly diminish in value. Very little is known now about the tropical American timbers. A number of timber cruisers have passed through the best timbered areas in Mexico and Central America, but they are ignorant as to the vast majority of trees, because they are usually in quest of only one or two kinds.

Among the 500 or 600 species of valuable trees found in tropical America there are a good many kinds, besides the few standard kinds, that can be profitably exploited and used in place of our rapidly diminishing supply. Many good and serviceable timber trees can be discovered which may be cut together with the other kinds having an established value. In this way the forest will be opened sufficiently for the better kinds to gain a footing and have an equal chance to compete with the less valuable.

In many parts of tropical America the only means of transporting the logs now cut is by floating them down the rivers. Many woods will sink in water, and, therefore, cannot be floated, as is the case with mahogany and cedar. By installing the proper means of transporting logs and lumber and by cutting all merchantable trees yielding useful woods, a large source of revenue will result and an important timber trade will arise.

A Consumer on Dimension Lumber

THE SECRETARY OF ONE of the largest hardwood consuming institutions in the country made the observation recently that to further conserve our lumber, and to protect the future supply, the elimination of waste is of the utmost importance. He suggested that the use of dimension lumber is a move in this direction, providing that it can be furnished in accordance with specifications. He further avers that his experience in this respect has been quite varied and not altogether satisfactory. He has found, according to his claim, many mills cutting dimension lumber, which will not follow specifications. Sorting, out defective stock is expensive to the user of it and to the producer and has the effect of discouraging both. He states that if the mills from which one is buying ship stock falling below specifications, it is better to cease doing business with them.

These observations are unquestionably true as far as they go. Nobody wants to do business with a man who will not live up to the terms of his contract, if it can be proven that he has broken such terms. On the other hand, it is only fair that the consuming trade cooperate with the manufacturers in this particular effort at conservation to the extent of investigating the dimension question with the view to ascertaining the relative value of clear dimension stock cut to the size required, as compared to the value of the ordinary lumber which they should have to purchase in order to cut out a sufficient quantity of clear stock.

It has been suggested in these columns many times that the attitude of the consumer is responsible for the fact that a great deal of small slabs and cuttings are wasted at the mill simply because the millman cannot secure a suitable price to return a profit to him. The attitude on the part of the consumers generally indicates that they believe that because dimension lumber is in many cases manufactured from what would otherwise be wasted, it should be sold at a ridiculously low figure. They in many cases do not figure from a fair basis.

Dimension values should unquestionably be figured on the basis of the actual value to the buyer, in that securing clear stock in sizes ready to finish saves a great deal of waste at the factory in addition to storage room, handling freight, drying unseen stock, etc.

If the real aim of the speaker in question is to conserve our timber and to protect the future supply, he should do his part by considering this phase of the dimension business.

Lumber the Goat as Usual

ONE HEARS NOWADAYS from time to time very emphatic statements tending to show that the poor "peepul" cannot build homes anymore because the wicked lumbermen have raised the price so high that nobody but the Standard Oil magnates and Andrew Carnegie and his associates can scratch together enough cash to put up even a chicken coop. Those giving forth these utterances never have the facts and figures at their command to prove that the lumber factor in house construction is the factor which has resulted in the present high cost of building construction. If these people would take the trouble to look into the situation and ascertain the actual facts, they would immediately cease to vilify the "lumber barons," and would pick their way as daintily, noiselessly and inconspicuously as possible back to the "tall timbers."

A sales manager of a large hardwood concern, who is a pretty close student of general affairs, recently stated that he became very much incensed a short time ago at a statement of this character made by a man who merely guessed at the situation. This man said that lumber values have increased to such an extent that the average man found it beyond his financial ability to build a home. He practically blamed lumber prices entirely for this situation.

The controversy led a delving into actual figures as to current lumber values compared to values ten years ago. The result showed that the actual advance has been very nominal. It showed further that a wooden house costing some $2,500 ten years ago, would today cost one-half again as much as that, or $3,750. However, an actual comparison of the values of lumber and other forest products going into a home at that time and this shows that the total difference in value in those ten years, as far as all wood entering into construction is concerned, would amount to only $150. These are actual figures based on records which are absolutely beyond question as to their authenticity.

It used to be that a contractor could figure about one-fourth of the total cost of construction for his lumber bill, but the ratio has been very decidedly changed. It would surely be but a fair thing for those inclined to put the blame of increased cost of home building in lumber to look into the corresponding cost of wages; to consider the materially shorter hours with much more pay on the part of the laboring element, and also to consider the greatly increased cost of various other materials and articles going into house construction. Or it might be well for the lumber trade itself to investigate these conditions and to compile the results in concrete form, and give them broadcast circulation. Such figures would go a long way toward eradicating the present sentiment against lumber.

The Buyer Sometimes to Blame

A MAN PROMINENT in the hardwood consuming trade, one who is connected with one of the biggest institutions of that character in the world, is responsible for an article appearing in the current issue of a certain furniture journal. In his article he says:

"The buyer is sometimes to blame for mixed grades. When one endeavors to secure lumber that is actually worth $30 a thousand feet for $25, he usually gets what is worth $23, for which he pays $25. A consumer of lumber should know the grades and insist on getting them."

While as a general thing the main body of hardwood buyers are intelligent men who are up on all details of their business, there is a considerable element of the trade whose knowledge of actual grades and cutting values of different grades, sizes and kinds of lumber, is very much open to criticism. It is just this class of man whose egotism makes him think he is a good enough buyer to purchase $30 lumber for $25, whereas if he is so little conversant with actual markets and intrinsic values of different woods as to believe this, he invariably is ignorant enough to accept even poorer value than he actually pays for.

These observations have come entirely from millmen and wholesalers in the past, and it is encouraging to note this expression from one who is in position to express an honest and unbiased opinion as to the hardwood buyer's knowledge of his business.

The personnel of the modern selling force has unquestionably been raised very materially of late years. The very character of competition has made it absolutely essential that intelligent, resourceful men be employed who are capable of earning good salaries. It is to be hoped that the observation above quoted is an indication that there is an apparent corresponding improvement in the personnel of the buying trade.

This is not intended in any way to insinuate that hardwood buyers as a rule are not up to their duties, but as in any line, some men are better than others. Again, with increasing lumber values and necessarily decreasing cutting values in different grades, it certainly behooves any large buyer to post himself as fully as possible as to the actual, practical and workable knowledge of grades, and all other facts pertaining to the woods he buys.

Progress

PROGRESS IS ALWAYS GRADUAL, but progress in perfecting sawmill and woodworking mechanism and new appliances has probably been as rapid as actual development in any other industrial line. Two questions have demanded the serious attention of the consuming trade for a good many years. They are, namely, more rapid and more thorough seasoning of lumber as to the raw material, and quicker drying of varnish, giving quicker finishing and shipment of completed articles.

Two inventions have taken care of these points and are very material factors in reducing manufacturing costs. In neither case is the effectiveness offset to any extent by a lessening in quality of the product. In fact, the claim is backed by proof that the processes lead to an accession of quality.

Pert, Pertinent and Impertinent

The Border Lights

A little more tired at close of day;
A little less anxious to have our way;
A little less ready to scold and blame,
A little more care for a brother's name;
And so we are nearing the journey's end
Where time and eternity meet and blend.

A little less care for bonds and gold,
A little more zest in the days of old,
A broader view and saner mind,
And a little more love for all mankind;
And so we are faring a-down the way
That leads to the gates of a better day.

A little more love for the friends of youth,
A little less zeal for established truth,
A little more charity in our views,
A little less thirst for the daily news;
And so we are folding our tents away
And passing in silence at close of day.

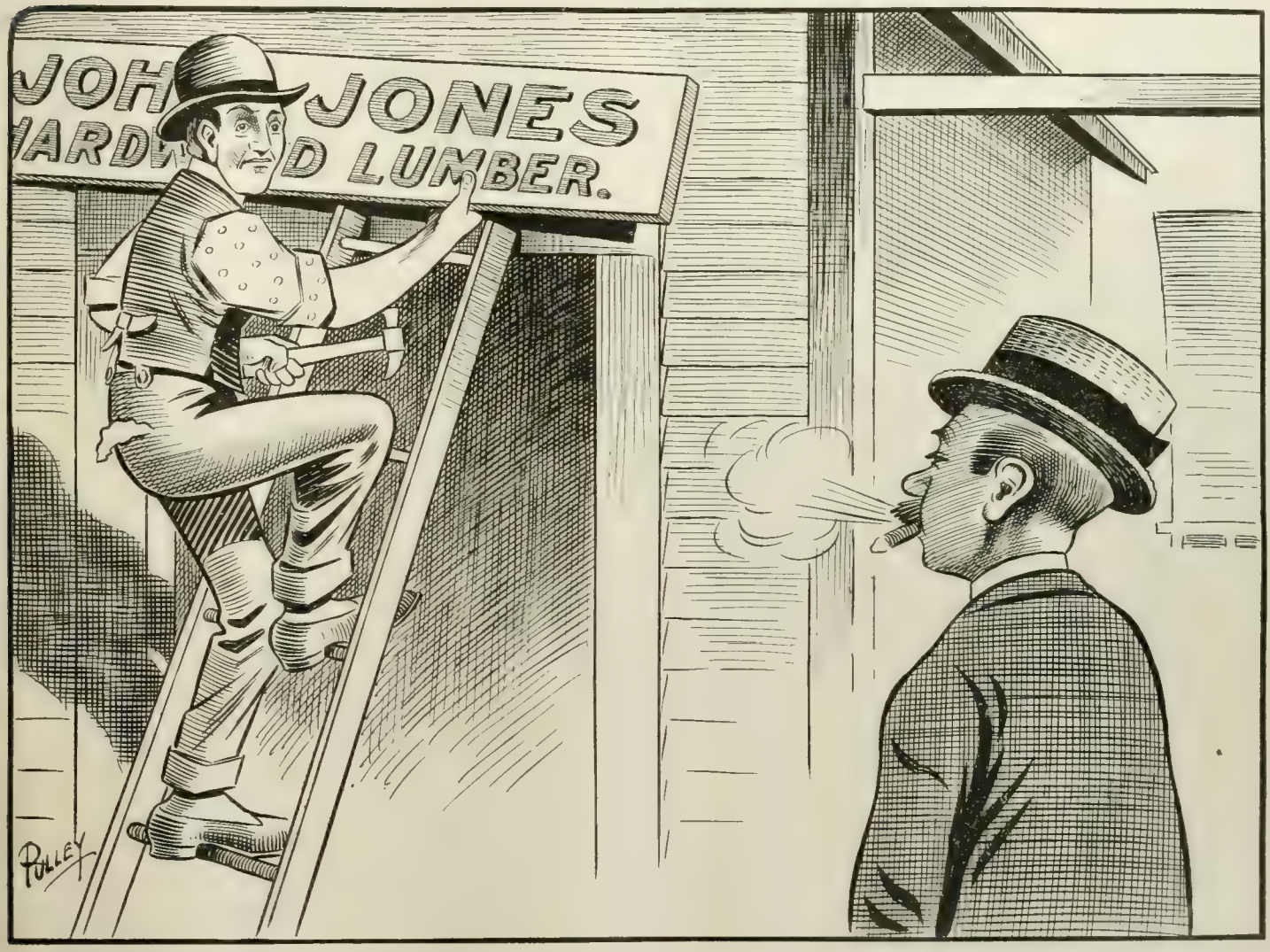
A little more leisure to sit and dream,
A little more real the things unseen,
A little nearer to those ahead,
With visions of those long-loved and dead;
And so we are going where all must go,
To the place the living may never know.

—*Rollin J. Wells.*

It Pays to Advertise

It is a well known fact that the reason hens' eggs are more generally consumed than duck eggs is because of the fact that a duck lays an egg and hides it away while a hen lays an egg and never gets through telling about it.

SPECIOUS NON-ADVERTISING ARGUMENT



Smith: What in the mischief are you doing?

Jones: Well, you see it is this way. Sometimes business is so good that the sign doesn't help any, and at other times business is so poor that a sign will do no good—so I am taking it down.

He Took Chances

A judge in a western town had declared that he would stop the carrying of firearms on the street. Before him appeared for trial a tough youth charged with getting drunk and firing his revolver in a crowded street.

"Twenty dollars and costs," said the magistrate.

"But, your honor," interposed counsel for the prisoner, "my client did not hit anybody."

"Why you admit that he fired the gun?"

"Yes, but he fired it into the air," explained the lawyer.

"Twenty dollars and costs," repeated the judge. "He might have shot an angel."

Puzzle—Where Was He?

It happened the other evening, and now a certain clubman is trying to figure out how he will square things with his wife the next time he is "detained" downtown. He was not going home for dinner, and when his wife answered the telephone he said: "Don't wait for me at dinner this evening, dear. I shall be detained on business."

"Very well," she replied. "I'm sorry you can't come home; but business is business, I suppose. Where are you now?"

"Where am I? In my office of course. I have had a very busy day."

"It's too bad you have to work so hard, George. But tell me something."

"Yes, dear. What is it?"

"How can you keep your mind on business with the orchestra playing 'Every Little Movement?'"—*Ladies' Home Journal.*

There's a lot of difference between being blind to the faults of your friends and winking at their vices.

Veneer and Panel Semi-Annual

The National Veneer and Panel Manufacturers' Association held its semi-annual meeting at the Auditorium Hotel, Chicago, on June 10 and 11, there being an attendance of over fifty. Four new members were enrolled.

After the roll call by the secretary, President Jarrell delivered his address, which follows, in part:

President's Address

We come here twice each year to help each other, and I want to say frankly that if you do not derive some benefit from your attendance at these meetings, it certainly is your own fault, and the same can be said of all of our meetings in the past.

We have discussed costs until some of you may think the subject has been exhausted and perhaps you are a little threadbare on it, but what subject is, or could be more vital to your industry than the knowledge of what your goods' cost to be manufactured? If this is not vital to you, what are you in the business for anyway? I dare say that a very large per cent of those present today had no cost system in vogue, but manufactured their goods in a haphazard way without any special method of figuring cost or arriving at a fair selling price for their goods, based on actual cost, until after they became members of this association and heard, on this floor, various discussions of cost methods and plans suggested for carrying out those methods. Your committee did not think our members were all ready for diplomas, and, therefore, has arranged for an address on the subject, "The Cost Problem—From a Different Angle," which I trust will cause some manufacturers to see there are items of cost which have not in the past been given proper consideration.

I am glad to note so many of our members are carrying advertising in the various trade papers. This is as it should be, not only from a standpoint of publicity, but because of the helping hand that is always extended to veneer and panel manufacturers, both collectively and individually, by our good friends, the publishers, editors and reporters of the trade periodicals. I do not mean to intimate, however, that this is philanthropy in any sense of the word, as I dare say each of you receive ample returns for every advertisement you run in these papers.

There is too much waste in the majority of veneer plants and this is caused, to a large extent, by the lack of standard sizes. While it is true, it probably would be a hard matter to cause furniture manufacturers to agree that it would be feasible for standard sizes to be made, yet I am sure this could be worked out to the satisfaction of all parties and would enable veneer and panel manufacturers to work up their stock to a better advantage and would really reduce, to a considerable extent, the cost of manufacture. Special odd sizes would be required for certain purposes, and when required, should be furnished, but at a price relatively higher than if standard sizes were taken.



B. C. JARRELL, HUMBOLT, TENN.,
PRESIDENT NATIONAL VENEER & PANEL MANUFACTURERS' ASSOCIATION.

You doubtless have noticed considerable agitation among the box manufacturers recently relative to a standardization of sizes, and the thing that seemed to be impossible a short time ago will certainly be put in effect soon. What would you think of door and sash manufacturers if they did not have standard sizes for their goods? How much extra waste would be theirs if each manufacturer maintained sizes and specifications evolved from his own brain and without respect to the ideas of his competitors? I will fully agree that the time has not been ripe before for standardization of sizes, as there were cheap woods in abundance, but conditions have now changed and there are no cheap woods. If you doubt the truthfulness of this statement, compare the prices of stumpage of some of the so-called cheap woods of today with those that were effective a few years ago.

General business conditions during the past six months have been excellent, the demand for goods in all lines has been above normal, consequently, when demanded, fair prices for veneers and panels have been secured. Factories, as a rule, have been kept busy and there is no special indication that the same general conditions should not continue. Crops have progressed far enough to practically assure another bumper yield, so, while there has been a perceptible tightening in the money market, which under less favorable crop conditions might prove to be serious, will probably not interfere with trade conditions.

Since our last meeting many of our plants were compelled to cease operations for a considerable time, on account of floods. This caused a heavy shortage of output during that time because of the enforced shutdowns, and a greater activity in the industry has been noted than would have been experienced under normal conditions.

I wish to call your especial attention to the good work that has been done by the clubs and to ask you to continue giving the club work your support. Every member of the association should also be a member of one of the clubs and every club member should support the association. Each is vital to the success of the other and to the industry as a whole.

There is a great temptation with all of us to combine pleasure with business when we come to Chicago and at times we feel like stealing away from our meetings, thinking our absence will not be noticed or will not affect the meeting in any way. If any of you think that way, I wish to disabuse your mind of that fallacy and to ask you to attend all of our sessions. Be here when the roll is called and remain until adjournment. If that shopping must be done, stay over another day. We ask you to give only two days in each six months to the work of the association.

Secretary E. H. Defebaugh urged activity among the members with a view to increasing the membership, stating that by co-operative action better methods of manufacture and a more satisfactory profit would be assured.

The speaker commented on the advisability of joining the southern traffic bureau with headquarters at St. Louis. He said that the efficiency of that bureau has been demonstrated, and inasmuch as the annual cost is only twenty-five dollars, it appears to be good policy for the association to become a member. This bureau would also be able to handle and collect freight claims, and the possibilities are that it would be able to easily collect enough to cover the amount of the dues. The speaker then commented on the status of the case of the fiber versus the wooden box.

The secretary's report was followed by that of the treasurer, which showed that the financial affairs of the association are in good shape.

Harmon W. Marsh of Indianapolis, Ind., then read an interesting paper entitled "The Publicity Side of Veneer and Panel Manufacture." He divided merchandising ideas into three divisions, namely, personal solicitation,, mail solicitation and trade paper publicity. He granted that personal solicitation is, of course, the strongest, and then analyzed the problem of profitable solicitation through the mails in the form of personal letters, circular letters and booklets. His contention was that the personal letter is the only efficient medium in most cases. He then analyzed the psychology of letter-writing and methods of display on form cards, particularly emphasizing the necessity for brevity and the bringing out of the strong points distinctly

The speaker confined the rest of his paper to an analysis of the possibilities of profitable trade paper advertising, going into details as to the probable character of copy, and the way of making up the ads. He particularly deplored the tendency to merely run a standing card without change, comparing this style of advertising as contrasted to larger advertising enabling good display with depositing money in a trust company at three per cent and investing it in a profitable enterprise at a great many times three per cent. He alleged that the main idea in advertising is not to attempt to make the customer consider the advertiser personally, but rather to consider his product. Hence, that product should be played up strong in copy. In concluding he treated with the difficulty of securing live copy in trade papers and analyzed the relation of the reputable trade paper and the trade it represents.

D. E. Kline of the Louisville Veneer Mills, Louisville, Ky., then read a paper entitled "The Cost Problem from Another Angle," which is here reproduced in part:

The Cost Problem from Another Angle

Perhaps nothing has occupied the attention of the manufacturer more continuously for the past several years than the problem of cost. We have heard constantly of costs. Cost systems, cost accountants, cost experts, efficiency engineers and business economists. Much good has been done, but the surprising feature is, how little good has been done compared to the amount of effort and money expended. Many, I fear, do not follow out what may be a perfectly good system of figuring costs on account of the necessary and constant labor involved.

Individual conditions determine the whole question. Each concern must work out its own commercial salvation to the extent of knowing exactly what it costs to perform a certain operation; not, mind you, what it ought to cost, or what it costs other people, or what it probably costs, but what it does actually cost every day the thing is done. He says: "mental laziness" (and I think he might also have added physical laziness) "is responsible for failure to go underneath the surface and get at the facts, in a good many cases. Veneer producers, like other people, would much rather let the other man go to the trouble of figuring the thing for them, even though it is quite likely that his answer is not correct, than to worry about getting the solution of the problem themselves."

The man who is running only rotary machines has an easy proposition compared with the concern which is not only putting out rotary stock, but also slice cut and sawed veneers; and there are concerns which do all these things and then glue up oak, gum, mahogany and Circassian walnut veneers in addition; and it must be admitted that figuring out costs in each department on each kind of wood in a proposition of that sort is not an easy task. But that only emphasizes the comparative simplicity of the problem of the rotary man, and suggests that there need be no excuse for the mill cutting plain stuff not knowing what the manufacturing operations cost.

Some veneer men take the attitude that it doesn't really matter whether or not they know exactly what stock is costing them; that the market price is established, and they must take it or leave it. But this is a fallacy, if one went no farther than to point out the desirabiilty, if not the necessity, of knowing how great a margin of profit—or loss—were being recorded.

I want to emphasize the statement that some veneer men take the attitude that it doesn't really matter whether or not they know exactly what stock is costing them; that the market price is established and they must take it or leave it. I wonder how much veneer is manufactured and sold upon just that plan, which is one of the other angles of the cost problem.

A few years ago a veneer manufacturer who cuts considerable quantities of gum, bought in the summer a large number of logs at an advantageous price, delivered at a railroad point in the South. Shipments of logs to the cutting mill had hardly started when the business world was struck by one of those so-called panics. Cutting practically stopped for lack of orders; mill yard full of logs and no place to put more. Fortunately, it could be arranged to have the logs lie at the shipping point indefinitely, and they did lie there (or most of them did) during the summer, the autumn and winter succeeding, and until the following spring. When they did come in to the cutting mill they were badly split on the ends and sap rotten. The rotten sap not only cost the loss of the best part of the log, but in addition it was necessary to adze or cut it off before good wood could be reached, and while the cutting was being done, fresh logs could have been bought at as low price as the original cost of the defective ones. Had Mr. Veneer Cutter figured this possibility into his cost? Hardly; and there appears another angle.

Some mills have been located on rivers for a series of years, one that I know of for nearly a quarter of a century. In that length of time, to be exact, 24 years, this mill has been flooded by freshets in the river three times. Well, once in eight years is not so bad, you say. Just so, but the three floods have occurred inside of the past six years and two of the three happened within a space of less than three months. We must all admit that this a little too much water in the system. Did Mr. Veneer Man figure floods into his cost? Hardly; this is another angle, and one that can be guarded against surely only by moving. Fires, cyclones, liability of all sorts, credits, etc., can be insured, but floods, no.

A few years ago this association seemed to realize the necessity for a table of relative values for dimension rotary cut stock. A committee was appointed to prepare a table. This committee labored with the idea uppermost that as lengths increased, value increased, and that the same principle applied to increasing widths, and that the ratio of increase as sizes increased was greater as applied to large sizes than to smaller ones. After spending much time in the preparation of a table or card, their report was presented to the Rotary Club with the statement that it was not a price list, but a table of relative values from which suitable discounts should be deducted to arrive at recommended minimums of sales prices. I think the committee expected some opposition and was prepared to argue the question. But the club moved to adopt and print, which was done without remark or question; the association afterward confirmed the action in the same indifferent way. In consequence the whole proposition is a dead letter and manufacturers of the larger sizes of dimension stock fail to obtain their value and each has quantities of so-called cut-downs to sell at any old price.

But some one says, what has that to do with cost? You are talking about sales values. It has everything to do with cost if one is brought to the realizing sense that one piece of rotary cut anything in any thickness 24x72 inches, costs more than two pieces of the same material 12x72 inches.

A sales agent wrote recently to a panel manufacturer, who is incidentally also a cutter, offering to sell at a low delivered price a car of ⅛-inch rotary cut stock in widths of 12, 14, 16 and 18 inches by 22 and 23 inches long. He stated that there was at least 40 per cent of face stock in the lot. The stock was cut-downs from larger sized dimension sheets. He said: "We have shipped several cars this year." I suppose several cars would mean at least three, and this one would be four cars in less than five months.

Why should a veneer cutter have an accumulation of several cars of cut-downs in such sizes as these within the short space of time named, or in any space of time whatever? Is he in cutting paying attention to the possibilities of the case to have such accumulations? Does he know what his large dimension sizes are costing? Does he know what these cut-downs are costing? Is he, in selling, getting cost for his large dimension sizes, or does he expect the proceeds of the cut-downs to represent his profit or does he figure the cut-downs as all velvet?



D. E. KLINE, LOUISVILLE, KY., ACTIVE IN THE WORK OF THE ASSOCIATION.

Henry H. Gibson, editor of HARDWOOD RECORD, Chicago, read an interesting paper on "Rational Conservation," in which he maintained that there is a good deal of hysteria in connection with the movement to conserve the country's natural resources. He maintained further that the honest workers proceed in an orderly manner to plan what they are proposing doing and go quietly about their work; that the sensationalist merely "comes along," demanding things that are impractical, insisting on following theory and having no patience with deliberation, although it is entirely necessary that a deliberate course be followed in order to insure efficient results. He loudly declaims on the conditions of forestry as applied abroad, not taking into consideration the vast difference in basic conditions here.

According to the speaker, the main point for consideration in conservation is the matter of profit. He raised the contention that unless a profit is insured it is idle to talk conservation to the practical man. He stated further that if the men interested in conservation want to perfect a greater saving in wood and mill operations they should show the manufacturer how to get some profit out of that waste, and that if the advice is sound it will be acted upon. He further stated that methods of conservation must vary with varying conditions in different parts of the country, and said that as much as could be consistently asked of any man who works timber in the woods or lumber in the factory, is that he make the best possible use of the material consistent with proper profit. There is no economy in saving material if it costs more to save it than to waste it.

One of the strongest points in the paper was the suggestion that diversified industries working hand in hand could solve the conservation problem as far as forest resources are concerned, and that the problem will not be solved in any other way. The one thing to be considered in this situation is that no single industry can make use of the whole tree, but that it is necessary to have various industries using different parts in order to utilize the tree in its entirety.

Alvin T. Coate of the Insurance Audit & Inspection Company of Indianapolis, Ind., gave an interesting and instructive talk on "Insurance Efficiency." This talk follows:

Insurance Efficiency

I am sufficiently acquainted with the temper and purpose of trade conventions such as this to know that you do not wish any historic or academic treatise on the broad subject of insurance. If this portion of

your program is to be truly helpful and worth while, it must deal with those facts and phases of insurance peculiar to the woodworker and even more especially to the veneer and panel manufacturer.

This discussion being then entirely informal, I shall take it in good part and as an evidence of your interest if I am interrupted at any point in my remarks by any question or suggestion.

Fire insurance by its vital importance demands first place in such a discussion. What is fire insurance in real essence? Since the Supreme court has declared that it is not commerce, a positive statement would seem to be in order. The accepted textbook answer is that it is indemnity against loss by fire; but you who, above almost all other trades, pay so heavily for insurance policies, know that collectively it is not indemnity because every one of you loses by fire every year the total sum of your premiums and against this loss you are not indemnified. Those of you who have suffered fire losses know that, after you calculated the cost of your new plant, the loss of business, the scattering of hard-won customers and the tedious delays incident to your re-establishment in business, you were not indemnified nor saved harmless.

Your immediate money loss was decreased by the amount of your recovery from the insurance companies, but you were not indemnified. Even the money paid you who had fires was warm from the pockets of those of you who did not; and thus the eternal process of robbing Peter to pay Paul goes on. The only real indemnity against loss by fire is not to have the fire. Fire insurance in its best estate is only the distribution of the loss over a wide number of losers, plus the administrative cost of the distributing process. Fire insurance in essence is a transaction in integrity; it is the tempering the wind of adversity to the shorn lamb. If the lamb has by negligence or intent caused himself to be shorn, the transaction at once becomes fraudulent. How then may you be least shorn by your own or your neighbor's fire loss? Remember you escape shearing only as there is no fire. Those of you who have been long in business have already contributed to the losses of others more than your own total insurance.

The cost of your very partial protection against money loss by fire insurance is, at least in theory, determined by the physical condition of your own plant. Your business is founded on highly combustible material in its most inflammable form. In most cases your buildings do not protect this inflammable material, but often add to its hazard. As a trade you do not have elaborate or expensively built plants. For these reasons it is often not practicable for you to go to the extent in protective apparatus indulged by manufacturers in other lines. Your plants operate most efficiently when they are near the supply of raw material. Your raw material grows in forests; as a rule then you are located in villages and small cities where the public protection from fire loss is imperfect and insufficient. You must, in the main, devise your own protection; how far can you profitably go in this direction? The most nearly ideal protection against fire in the individual plant is, of course, the automatic sprinkler equipment. Can you on sane business principles justify such an expense in your plant? From the money cost perspective, the answer to this question is the relation between the cost of apparatus, and its maintenance, and the saving in premium. The cost of installation is more easily determined than the cost of maintenance. The latter varies radically under differing conditions. In woodworking plants the physical deterioration of such equipment is small; the maintenance cost lies mainly in preventing freezing in tanks and wet systems and maintaining air pressure in dry systems.

In your trade you may probably rely on a deterioration ratio less than 5 per cent annually on a combined deterioration and interest rates of, say 10 per cent annually. Your premium cost after the plant is equipped varies in different states from 50c per hundred dollars of insurance to $1.50 for veneer and panel plants in frame structures. The cost of preventing water in elevated tanks from freezing in cold climates is probably the greatest single item of maintenance and is usually underestimated. For the small plant not under steam at all hours, an electrically driven pump is usually more economical and if the current is dependable and the water supply sufficient and unfailing, the same degree of efficiency may be produced.

In a general and approximate way, the cost of sprinkler equipment may be determined at from $3.00 to $3.50 per head, allowing one head for each 64 square feet of ceiling or roof surface. Next in considering this matter comes the question of what your business is worth to you. By this I do not mean your property or plant, but your business. How long would you be suspended by a serious fire and how long thereafter would it require to get your trade well in hand again? Figure this on the basis of last year's 300 working days and add this per diem loss to your premium saving as the credit side of your protection account. Automatic sprinklers properly installed with plenty of water under pressure will extinguish 90 per cent of the factory fires. And do not forget as a part of this calculation that you have no moral right to throw onto the bending shoulders of the public the insurance loss of your plant.

If you cannot justify in your plant the cost of sprinkler equipment, do not for that reason neglect the simpler and less expensive means. The primitive water pail and cask is still entitled to the hero medal. Liquid chemical extinguishers for ceiling and roof fires and a Pyrene extinguisher for your dynamo or motor room are an urgent necessity and cost little. Last and greatest of all is cleanliness and care. Even veneers are not chargeable with spontaneous combustion—they must be set on fire by somebody directly or indirectly. Dirty dry rooms, unprotected by steam jets, belching smoke stacks, stoves, bad wiring, combustible roofs—these are your accessories before the fact. Every one can see them—no one has the moral right to tolerate them.

Finally the commonly accepted, though partial and unsatisfactory "first aid to the injured"—fire insurance. How much should you carry, what should it cost, how should it be written and in what kind of companies? It is one of the unexplainable things of our business system that a man who buys a suburban lot for $400 will, before paying over his money, demand that the seller warrant and defend the title he gives; he will demand an abstract record of every transaction the poor little lot has ever known and finally he will hire an attorney to examine the abstract. He stops short only at examining the attorney. I am not defending even this omission, but the same man will buy insurance policies, which represent in many cases every dollar of his net worth, without even looking into the joint contracts into which he has entered or questioning the financial responsibility of the insurance companies issuing them. And this same man will tell you gravely that there would not be such an alarming grist of insurance litigation if insurance companies were not tricky and eager to grasp technicalities.

The standard fire insurance policy is among our most complex civil contracts and necessarily so because it must perforce cover a multitude of widely varying conditions. It is not only complicated, but it is joint —you are with the company, equally its maker and party. It is not an ex-parte proposal to do something for you or even to you.

At this late hour enters the titular subject of my remarks, "Insurance Efficiency." If you pay too much for your insurance, you do not get efficiency in expenditure. If you carry too much on one portion of your plant and too little on another, you do not get efficiency in results. If you permit too many items in your policy form, if you permit conflicting and non-concurrent forms, you sacrifice efficiency. If you do not fulfil your obligations under the policy, you imperil your financial salvation. I do not believe it is an exaggeration to say that twenty-five per cent of the insurance premiums paid out *buy nothing.* How shall you determine the efficiency and even the enforceability of your policies? In this policy contract into which you entered, with full presumptive knowledge, the insurance company insures you against direct loss by fire except as hereinafter provided.

The body of the contract begins with the cheerful statement that "this company shall not be liable" and follows with the comforting declaration that "this entire policy shall be void." These sinister challenges struggle for pre-eminence throughout the policy which closes by reminding you that "this policy is made and accepted subject to all the foregoing stipulations and conditions."

This is very like the man who claimed to have observed that whenever he fell into a period of bad luck it persisted steadily for seven months and then grew gradually worse. But it will pay you well to take the printed policy and read carefully beginning with "this entire policy shall be void if—" and ask yourself whether any of these conditions exist in your plant and as you find that they do, see that an explicit permission is embodied into the rider.

Keep your insurance in as few items as possible—make these items cover as broadly as possible. When you have agreed on the rider with all its permissions and agreements have that identical rider and no other attached to all policies. Do not allow separate or additional endorsements.

Then perhaps you wonder why your premium rate is just what it is. You ask what you can do to be saved and after each improvement in your plant some new deficiency is found by the next inspector. First of all ask for your itemized rate make-up or schedule, showing every item of charge from the basis or key rate on. This will throw much light on the subject and may disclose many needless charges in your rate which little or no expense will remove. When you have eliminated all the deficiency charges practicable and find the rate still burdensome, the question of competing insurance arises. With few exceptions, this is a snare and delusion. Woodworkers are to be congratulated upon the few but splendid mutual and inter-insurance companies they have built up. Several such have preserved a spotless record for many years and been uniformly profitable to their members, paying back annually as much as 40 per cent of the premium. Small companies operating through distant brokers are fore-doomed to failure and should be avoided as a plague on legitimate insurance.

Always remember that you cannot collect from your insurance policies more than you can prove. Keep better inventory records—they will save you time and money when the loss comes. Don't enter excessive and arbitrary depreciation charges in your ledgers. If you wish to reduce the asset value of your plant as a convertible or liquid item, do so by opening a reserve or sinking fund account. Do not attack the physical or replacement value; that is what depreciation means and there is often no relation between the two. Finally, be clean and careful in the plant, watch every policy religiously, know what your plant values are; carry enough insurance to preserve you from bankruptcy and trust in a kind Providence.

E. H. Defebaugh of The Barrel & Box, Chicago, read a paper on "Price Maintenance," which was followed closely. He showed that in cutting a price the seller eventually cuts his own figure, as his competitor will immediately follow suit. The paper further said that

there may be a temporary stimulation in certain woods, but that as a general thing the demand for an article, particularly if it is a staple article, is not much increased by breaking a fair and honest price.

The paper pointed out two avenues open to the manufacturer facing a price-cutting condition; one is to persistently refuse to join any such movement and the other is to join the general scramble and fight it out in the best possible shape. He said that while in the former case, nine times out of ten, the manufacturer will eventually come out on top, the price cutter not only demoralizes the market and injures himself, but he upsets business conditions, making it hard for the rest of the trade as well as for himself. He said that the general sentiment of buyers is that they will pay a fair price for any commodity which they have to buy unless some producer offers it for less.

The paper, getting down to the subject suggested by the title, said that the proper way to arrive at a price is by keeping an accurately computed account of cost. Cost maintenance, according to the paper, means more than holding to the same price and refusing to lower it. It means rather that a living price should be maintained and no man should hesitate to raise his selling price when cost of production warrants so doing.

In speaking of the accumulation of slow-moving items, the paper suggested that it is more up to a man's business judgment than to anything else as to whether he should cut his price in order to move his stock, or should hold the stock in anticipation of possible better prices.

The membership committee then reported, submitting applications for membership from the following: Stolle Lumber Company, Tripoli, Wis.; Breece Manufacturing Company, Portsmouth, O., Anderson Veneer & Sawmill Company, Inc., Louisville, Ky., and the W. T. Thompson Veneer Company, Edinburg, Ind. These concerns were duly elected to membership.

George H. Shepard of the Emerson Company, McCormick building, Chicago, talked on "Efficiency of Production." The theme of his talk was that the best method of creating efficiency of production and low cost of operation is to plan carefully ahead on all operations rather than merely working in a haphazard manner. He said that a responsible man should do the planning for each department of the business rather than leave the important details to subordinates, who would not only lose time in their planning, but whose plans themselves would probably result in a loss of considerable time and money in operation. He maintained that anything inefficient at a plant tends to increase unit cost production. He said that by eliminating inefficient methods wherever possible, and planning in their place efficient methods of operation, it is possible to greatly improve the efficiency in most plants.

The resolutions committee submitted a resolution heartily endorsing the Newlands River Regulation bill now before Congress at Washington. A further resolution was passed thanking the various speakers.

The meeting then adjourned to convene at Chicago in December for the regular annual meeting.

ENTERTAINMENT

On Tuesday evening, June 10, all those in attendance made a trip to the South Shore Country Club, where they enjoyed a most excellent dinner, which was accompanied by entertainment of a pleasing nature. Because of the excellent entertainment features offered and because of Secretary Defebaugh's deftness in mixing punch, everyone in attendance pronounced the evening to have been thoroughly enjoyable in every respect.



Eagle Wood



Aquilaria agallocha is the agar or eaglewood of commerce. It is produced by a large tree inhabiting Silhet, in India, and furnishes an odoriferous wood, called aloes-wood, which is supposed to be the aloes-wood of Scripture. The ancients knew this valuable wood under the name of agallochum, and they frequently confused it with the woods botanically known as *Excœcaria agallocho* and *Aloexylim agallocho*. The wood contains an abundance of resin, and an essential oil, which is separated, and highly esteemed as a perfume. The Orientals burn it in their temples for the sake of its pleasant fragrance. The wood that comes occasionally into the American market as eaglewood is used as incense and also for carving, often commanding a high price. The heartwood of the stems and larger branches constitutes the only available portion of the tree. One writer states that in the interior of old trees are sometimes found irregular masses of harder and darker-colored wood, with a honey-like scent, which constitutes the eaglewood of commerce. The wood of this species is, according to reliable authority, naturally white or light yellow, and only diseased portions of the trunk and larger branches turn dark and become scented. Gamble, in his book on Indian timbers, states that eaglewood or agar is found in fragments of various shapes and sizes in the center of the tree, and usually, if not always, where some former injury has been received.

In collecting this wood the trees are felled and allowed to rot for about three years in the forest, after which the logs are divided up into smaller pieces and the odoriferous wood cut out. The uses of eaglewood are not generally known. It is employed largely in medicine, but the wood is also used for carving and small objects of ornament. In India the wood is recommended for tea boxes, in spite of its lightness, as it is durable and not liable to damage from white ants. The wood is also used by the Karens for bows. The bark of this tree is often removed by the natives and used for writing paper, as it is thin, tough and very even in surface and texture. The tree does not suffer by being barked, and the natives often cut the bark and peel it off for mattresses, and even counterpanes are made of it.

True eaglewood has small and moderate-sized pores which are arranged in short radial rows. The pith rays are fine and very numerous; the distance between two consecutive pith rays is less than the tangential diameter of the pores. Other but inferior kinds of so-called eaglewood are said to be furnished by *Excœcaria agallocho* and *Aloexylim agallocho*, but the true eaglewood may be distinguished from that of *Excœcaria* by its pores being smaller and less numerous and by its pith rays, which are more numerous and finer. *Aloexylim* comes from Cochin-China, and belongs to an entirely different family of plants. L. L. D.

A Victory for Wood

An anonymous correspondent has made certain statements in a letter addressed to HARDWOOD RECORD under date June 2, regarding the use of rolled steel frames and sash for buildings. The correspondent alleges that while rolled steel sash and frames have been specified in a great many buildings, they have not proven satisfactory for various reasons, one very prominent reason being the fact that it is impossible to maintain a normal temperature inside of a building so equipped in cold weather. In support of this statement is instanced the case of a great publishing house in Philadelphia, which has spent several millions of dollars in the last few years for buildings. This concern demanded steel frames and sash in all its windows. It is gratifying to the lumber trade and its exponents to know that this company has now been obliged to tear out every last one of the rolled-steel frames and sash, and to install wooden ones in their places.

This is merely another one of the many instances constantly coming to light to go to prove that while many substitutes for wood are logical in certain places, the wholesale substitution cannot be carried to a successful issue for the simple reason that the so-called "substitutes" are not substitutes at all.

An Enemy of the Hickory

Editor's Note

The samples of hickory referred to in the accompanying article were cut in Maryland and were sent to HARDWOOD RECORD with a request for information as to the cause of the injury and the best means of treatment.

The abnormal growths on the branches of the samples of pignut hickory are caused by the attacks of a very small fly which seems to be a cynipidean insect of the order hymenoptera. As far as could be discovered by a somewhat minute examination under the glass, not a single insect, dead or alive, remains in the sphaeroblasts, or hard galls, on the branches, and it was not easy to determine the exact species that did the injury. The old saying, "by their fruits ye shall know them," has to apply in this case, in the absence of the creatures themselves. There is little doubt that a gall fly was responsible for the work. This insect belongs to the same order as wasps and ants. It has four bright, thin wings. There are about 7,500 species of hymenoptera in this country, from which fact it is not to be wondered at that, in this case, the exact species is hard to determine, particularly since the guilty little fellow was out and gone probably two years ago, at least, and only his dry, fungus-eaten house remains to give a hint of his identity.

A good many interesting facts, or supposed facts, may be given regarding the cynips responsible for the excrescences in question. In the first place, the enormous disproportion between the size of the insect and its house is astonishing. Though the creature itself was not seen, the hole in the sphaeroblast through which it emerged was carefully measured under the microscope, and it was found that the fly must have been of such smallness that more than 200,000 could occupy a single cubic inch. That was a small thing to raise such a wart on a hickory limb, and it is an interesting story how it does it. The little wasp-like creature thrusts its sting through the outer bark of the twig and penetrates the cambium layer, or inner bark, and there deposits an egg. In a few weeks it hatches and becomes a minute grub. Up to that time nothing in particular happens to the twig, and it would be next to impossible to detect any wound or injury, because the hole made by the sting is so small that a microscope is needed to reveal it.

When the egg hatches, it is not long before something begins to happen to the hickory. The larva, or grub, begins to absorb the juice from the cambium layer. It has a ravenous appetite, but it has no mouth, consequently it cannot eat common food. It must have thin juice, and it absorbs it through its skin. It must have a perpetual and bounteous juice bath all the time, and it is the grub's business to take measures to get it. It does it by irritating the tissues of the inner bark. It may do this in two ways; one by exuding from the pores of its skin a poisonous substance, or it may irritate by simply wriggling and flouncing about in its juice bath. The so-called "jumping bean of Mexico" is a well-known example of the activities of larva while going about its ordinary business. It can be readily understood that a grub with sufficient strength and activity to cause a "bean" to hop all over a table top would set up considerable irritation if confined in the soft tissues under a tree's bark—particularly if supplemented by a blistering poison.

The vital forces of the tree rally to throw off or isolate the irritating influence. The grub will not be thrown off and the tree isolates it by forming the excrescence.



ATTACK ON PIGNUT HICKORY BY CYNIPS.

By that time the grub has its growth and has no further need of a juice bath.

The larva may lie, apparently asleep, for months before it hatches and decides to bore its way out to try the realities of the wide world. It is believed that some remain two years before they try to escape. They seem to know something about the world which they have never seen, for it is said they will not emerge at any time of year except in spring while plants and leaves are tender and juicy, and are just right for sucking and stinging. How they can tell when to come out, no man knows. Perhaps it is the same kind of knowledge which prompts the groundhog to come out of his hole on "groundhog day."

So much for the growth and flight of cynips. The vacant house left behind is an interesting object. One of the hickory excrescences was broken open and examined both with and without a microscope. When no glass is used it is found to be a hard mass of bark and wood—mostly bark. Detached nodules of wood are scattered through the mass. Irregular cavities, some about the size of a small bean, are found here and there, and a tunnel about as large as a cambric needle leads from the chamber to the outer world. This is evidently the passageway bored by the insect when it wants to escape. The outer opening of this passageway, if everything is favorable, may barely be discerned by the naked eye, but under a magnifying glass it is seen to be as round as a gun barrel. In fact it suggests a miniature crater leading from a subterranean volcano.

In the bottom of each chamber lies a small, white mass, twice as large as a pinhead. It looks like mold, but when highly magnified it is found to be a web, woven in sheets resembling tennis nets, and probably used by the larva as blankets in which to wrap its body when it takes its long sleep. Some of the web is not made into sheets, but lies in long strands, resembling flax tow, or frazzled silk.

The question may naturally be asked whether injury to the tree is likely to result from attack by cynips of that kind. The tree from which the specimens were taken was undoubtedly injured. The excrescences killed the branches beyond the points of attack, though they do not do so if the excrescences remain small. The cambium layer is destroyed—it seems to dry up—beneath the growth. Probably all its juice goes into the excrescence and is there drunk by the larva or dissipated through the abnormal tissue. A cross section through one of the sphaeroblasts—which seemed to be a typical one—revealed the branch's struggle to overcome the injury. For two years, and probably longer, growth continued on one side of the twig after the other side was dead, but the whole circumference finally yielded and the branch died. In every one of the specimens examined, the outer end of the limb was dead. If the tree is attacked in numerous places, death to the whole trunk will doubtless follow.

Such an attack might be successfully combatted, but it is doubtful. In the case of the hickory from which the samples were cut, the attack was evidently made by a swarm of insects. Ordinarily, such attack would not be discovered until the excrescences begin to enlarge. The larvæ are by that time hatched and are entirely concealed beneath the bark and it is difficult to see how any kind of spraying could

reach them. When the growths first begin to show, the twigs bearing them could be cut off and destroyed, and in most cases that would save the tree but it is evidently useless to do anything with a tree on which the growths are as old as the samples sent, because the insects have long ago taken their flight, and it will avail nothing to destroy their deserted houses.

A remarkable fact may be mentioned in this connection, regarding gall flies which cause excrescences of this kind, and it will serve to show how very difficult it would be to successfully combat them, if they should become numerous and destructive. Some of them reproduce by what biologists call "alternation of generations." That means, in this particular instance, that the wasp which issues from the pignut hickory gall seeks some other tree or plant on which to deposit its eggs. The gall thus produced may be very different from that on the hickory, and the insect may not resemble its parent in scarcely any particular. Thus a brood of the second-generation insects might be coming on in the vicinity of hickory timber, while persons on the lookout for signs of the pest would not suspect that it was the old hickory fly in another form and hatching from a totally different sort of excrescence. Nevertheless, the second generation, by some kind of instinct or knowledge, goes back to the hickory to make its attack, and the next generation is like its grandparents.

Not infrequently insects of other kinds take possession of galls and excrescences which they had no part in producing. It is thus necessary to exercise care in examining abnormal growths, or an intruder, happening to be found there, may be mistaken for the builder. In examining the hickory excrescences, in the present instance, fungus was discovered in all parts of the growth, and it might have been inferred that fungus was the original cause but it appeared that the fungus was wholly saprophytic—that is, growing in dead wood only—and the probability is that it did not appear in the mass until the wood was dead, and therefore could have had nothing to do with causing the growth.

The best guarantee against dangerous multiplication of gall-producing insects, as well as wood borers, is the warfare which certain other insects wage upon them. Some of these are large and powerful wasp-like insects that go about hunting for larvæ, which they locate with unerring precision though wholly out of sight in the centers of large galls or deep in burrows in wood. The strong stinger is thrust into the wood, like a nail is driven into a post, and pierces the larva, though it may be an inch or more below the surface. If borers or gall flies become too numerous in a locality their enemies with the formidable stings are almost sure to appear and thin them down to normal numbers. That is what is liable to happen if the cynips become too numerous on the pignut hickory, and their very numbers will bring destruction on them.

Workmen's Compensation

Editor's Note

The following is an address read by Clarence L. Boyle of Kansas City before the National Lumber Manufacturers' Association in session in that city June 3 and 4.

The subject given me for discussion, "Workmen's Compensation," presents many grave difficulties. In the first place, the matter for consideration is highly scientific and, consequently, must be handled with careful regard to available data.

The thought to be developed will not permit of oratorical attempts or rhetorical flourishes. We will have to hold close to the willows and examine the situation with care and caution. Fortunately, I am addressing a body of business men. As I understand it, you are not here to be entertained but rather to consider seriously and take counsel among yourselves touching important business matters that hold close relation to the success of your present as well as your future business activities.

Before taking up my subject proper, permit me to say a word in passing upon the propriety and very great wisdom of men engaged in great business undertakings such as you men are engaged in getting together and discussing conditions that prevail in your business; if such conditions are harmful, then to adopt such measures as will correct the evil. For, indeed, it must be conceded that if bad economic conditions prevail in any business, and especially in the great lumber industry, not alone will that particular enterprise suffer but the whole body politic will suffer also. In fact, there never has been a period in the history of the lumber business when close, militant organization was needed more than at this very hour.

In the last few years there has been an hysteria of the public mind relative to the operations of men engaged in large undertakings. The individual or organization that achieves success is at once placed under the ban of suspicion. Achievement is a badge of fraud. Property accumulation is evidence of sinister conspiracy against the common weal. Courage, talent, enterprise, sacrifice, unceasing devotion to an undertaking, if crowned with success, spell nothing but dishonor, in the estimate of a very large class—a class that is most active in moulding public sentiment. Of course there are now and always have been business men who would take an unfair advantage of the public. But why condemn all for the dereliction of the few? In every walk of life you will find the unworthy. It is also true that in every walk of life the great majority is honest, patriotic, fair dealing and earnestly seeking the right road to success; otherwise, this fine old world of ours could not have traveled as far up the steep incline of progress as she has. Error may succeed for a space, but in the final equation it must and will fail. We as a people have not gone forward and upward by the aid of error. The composite purpose of all is right and true. This holds good with those engaged in the lumber industry as in any other calling. When the history of many of the southern and western states is finally written it will be recorded that the men composing this organization have wrought mightily for that which was enduring and most worthy.

There has been a concerted attempt to discredit the lumber industry, and this not only with the large manufacturing interests but down to the small retailer, struggling for an existence. Just why the lumber interests should be selected as a vicarious sacrifice is as incomprehensible as Spencer's definition of evolution. There is a story to this effect: An itinerant clergyman sat one morning in the railroad station of a small western town reading Spencer's "First Principles." A cowboy chanced in. "What you be readin', mister?" he inquired. "I am reading about evolution," the clergyman replied. "What's evolution?" The clergyman read to the cowboy Spencer's definition: "Evolution is an integration of matter and concomitant of motion; during which the matter passes from a relatively indefinite, incoherent homogeneity to a relatively definite, coherent heterogeneity; and during which the retained motion undergoes a parallel transformation." The poor cowboy wandered for days in a dazed, semi-conscious condition.

The lay mind can grasp the meaning of this uncalled for and vicious attack on the lumber industry with about the same ability as the cowboy assimilated Spencer's definition of evolution.

The fight is on and it is up to you gentlemen to defend yourselves. You can not protect the interests you represent single handed. You must stand together. Through this splendid organization you can reach the public conscience. The trouble is the public mind has been poisoned through the activity of those who have been actuated either through malice or ignorance. You can, if you will, counteract this poison. You can do this, however, solely through organization and publicity.

The business interests of the great state of Missouri at this very moment are seriously jeopardized by reason of the indifference and apathy of her business men. The legislature that has just adjourned has passed a law relative to the important subject of insurance. This law is so worded that it is seriously questioned as to whether in-

surance companies can do business under it. We are all very much concerned about the matter now, but the horse has gone. No interest of the state can benefit by the law, but all may suffer. The trouble with the business man is that he will not interest himself sufficiently in the politics of state or nation. He leaves the all important subject of law-making to those who in the very nature of things, are bound to blunder.

The line of thought here suggested brings us logically to the subject assigned for discussion, to-wit, workmen's compensation. In sending men to the legislature has any care been taken to select those who by education and experience were fitted to deal with this all important question?

Let us try to develop this subject, and from a frank discussion seek to draw some helpful conclusions—conclusions that may aid in moulding the splendid concept of workmen's compensation to a most useful instrument for the well being of the laborer, and also assist in giving a correct solution of this phase of our industrial activity.

In studying a law, or a proposed law, the first thing to be considered is the evil sought to be corrected.

The influence back of this movement for workmen's compensation laws grows out of certain inherent inequalities in the laws governing employer's liability. Prominent among these inequalities are the following: Assumption of risk; fellow servant doctrine; contributory negligence.

Of these in their order, assumption of risk: This doctrine, broadly speaking, grew up in the law on the theory that the laborer, presumed to be a rational being and voluntarily entering into a given employment, naturally assumed the risks that were incident to the work. It can be readily seen that this doctrine in the very nature of things works a great hardship on the laborer, and this especially in the light of the varied and complicated machinery that enters into modern industrial activity. For several years it has been urged that the worker should be relieved of this burden, and this urgency has been based on the very evident theory that the industry itself should carry, as an element of the cost of production the essential risks incident to its activity.

This principle became engrafted on the law as far back as 1837, and was first definitely announced in the case of Priestly v. Fowler, decided in England. This doctrine is grounded on the theory that the servant is in a far better position to observe the movements of his fellow-servant than is the master, and that as a result of this superior opportunity for observation the servant is in a better position to protect himself from the negligence of his co-worker. Therefore, if a servant is injured through the fault of a fellow servant the law will excuse the master, that is, if the master has used due care in employing the servant in the first instance.

This doctrine may have been justified in the primitive activities of industry. Before the introduction of modern machinery the employer was a worker with the men in shop and factory. And but few men were employed. In the nature of things the employer was in just as good a position as employe to protect himself from the blunder of his companion, and hence the doctrine.

The conditions surrounding the worker have changed mightily. In place of two or three men working side by side there now may be hundreds under the same roof. Steam and electricity have complicated the problem. To hold an employer responsible for the carelessness of some man whom he possibly does not know, and whom he has no chance of observing, is not only unfair, but not in harmony with the broader and better view of society today.

This doctrine is founded on the theory that if the employe's own carelessness is responsible for or contributed to his injury the master is not liable. The same general reasoning is applied to assumption of risk and the fellow servant doctrine can be used with equal force to the doctrine of contributory negligence. The principle took root when modern machinery had no place in industrial activity.

Now, one of the cardinal points in workmen's compensation is the elimination of assumption of risk, the fellow servant doctrine and contributory negligence as defenses. In other words, the principle of workmen's compensation is correctly stated when I say that the law in effect acts as an accident insurance policy in favor of the employe, with the employer as the insurer.

No matter under what circumstances the employe is injured (save and except through drunkenness and intentionally inflicted injury) he is entitled to compensation.

The whole doctrine is founded on the theory that the industry and not society should bear the burden of those made inefficient through injury, the thought being that there is no legal or moral blame on the employer, but that the industry should carry the load. The cost of the accident should be added to the article with all other items of cost, such as taxes, deterioration, etc.

A most important factor that has aided in the crystallization of public opinion touching this whole subject has been the utterly inadequate results to the employe, the tremendous drain on the employer, and the heavy cost to the public of our judicial system.

As has been very aptly stated by a careful student of the question, "Employers' liability laws appeal to cupidity, encourage speculation, breed perjury, excite the meaner passions, cause corruption of the morals of the industrial community, and are inimical to industrial peace."

The waste that is attendant on this class of litigation is enormous. No one profits but the lawyer. The worker gets but a per cent of the recovery; the employer frequently is compelled to pay far in excess of a just sum; society at large must carry the burden of the legal machine.

It is agreed on every hand that the old conditions are intolerable and must pass. The employer has been victimized by present conditions as well as employe, and is anxious for more definite and equitable conditions to prevail. The employer asks that compensation laws be made just to employe and employer.

We must also always keep before us that, after all, society at large must carry the ultimate burden of this cost, and therefore industry should not be overloaded with the cost involved by workmen's compensation laws.

The limit given to discuss this subject will not permit me to go into an analysis of the various laws that have been formulated, nor will I be able to take up all of the important elements that of necessity should enter into the law. I can not touch on constitutional questions. My purpose is to call attention to the certain general features and more especially discuss the insurance phase of the question.

From the standpoint of the workman there are three general points that should be kept to the front:

1. The right to compensation and the amount of it for particular injuries, or death, be so definite as to leave as little as possible for controversy or difference of opinion as to the injured workman's right to and the amount of compensation.
2. The workman or his family must be so protected in making settlements that no advantage can be taken, and that settlements be prompt.
3. That the workman and his dependents be secured against insolvency of the employer so that the payment of his compensation be certain.

From my connection with the subject I am quite certain that a great majority of the employers have no objection to these suggestions. Naturally, the employer insists that the amount allowed be arrived at from a careful and adequate knowledge of conditions, and with due regard to the vital economic questions involved. Many of the laws thus far passed clearly indicate hasty conclusions on the question of cost to the industry. In this connection it is well to bear in mind that under our form of state governments great harm may flow to an industry in one state where a greater burden is placed upon it than is carried by a similar industry in a neighboring state. This fact should be urged constantly, to the end that as far as it is practicable the burdens be just and uniform. In this connection permit the suggestion that there is a great need of some central committee, composed of employers, who can cooperate along lines here outlined. In this I do not purpose indicating that these laws should be framed to the employer's advantage, but rather to the end that industry be not crippled and thereby protect labor as well as capital.

Workmen's compensation laws should be evolutionary and helpful to all concerned, not revolutionary and destructive.

Again, the employer is concerned in the suggestion that the

method of adjustment should be simple, direct and expeditious. In this connection the New Jersey plan is, in the opinion of careful students, the most feasible. There can be little trouble in adjusting claims where the law is definite. Expense and time will be saved by permitting employer and employe to settle direct with each other. If this can not be accomplished, a simple method of arbitration should be the method resorted to.

Coming to the question of the solvency of the employer, and in this connection the question of insurance, we approach a phase of the problem laden with much controversy.

As has been stated, workmen's compensation laws are in their ultimate analysis insurance acts running in favor of the employe, the charge to be borne by the industry. In the very nature of things, a most important consideration on behalf of the workman, as well as for society in general, is this: How can this charge be best guaranteed? It is contended by many that the funds contributed by the industry should be managed by the state. On this theory the so-called state insurance plan is builded. I want to pay my respects to this phase of the whole question, and in doing so will call attention to the Washington act, for in that state the principle of this so-called state insurance plan has been adopted.

Before taking up a discussion of state insurance, let us first give attention to the idea back of all the controversy.

The compensation act fixes the amount to be allowed for a given injury. How can it be made certain that the employe will get the money? All the laborer or his dependents are interested in is that the award will be paid, and paid without delay. The employer is concerned with the amount to be paid and the cost incident to underwriting the risk, if he desires to carry insurance. Now, if we were to talk for hours, could more be said? The employe, on the one hand, wants to know that he will get his money and does not desire a bureaucratic lot of red tape to intervene in the getting of it. The employer, on the other hand, is anxious to deal with his men direct and not through the medium of an utterly useless and very mischievous political machine.

Generally, employers and employes are in favor of replacing the unjust, wasteful and unsatisfactory employers' liability system with a compensation plan. Probably no compensation act will be entirely effective unless compulsory and exclusive. But whether compensation be optional or compulsory, it is paramount that there should be no further invasion of private relations and individual rights than is necessary to accomplish the desired result. The injured employe should be protected against the insolvency of his employer. To that end employers in occupations embraced by the law, having less than a certain surplus or financial rating as a going concern, should, as a condition precedent to engaging in such an occupation, be required to carry casualty insurance either in a properly organized interinsurance organization or in a state regulated company. No employer financially strong enough to discharge his personal obligations should be required to pay premiums to a state or private insurance organization. Why should the state undertake this service when it can be done so much more effectively through the medium of private channels? The business of insurance is in its very essence highly scientific; why take this business out of the hands of experienced, financially sound and thoroughly organized concerns and turn it over to the uncertain fortunes of a political machine? Mark you, we are not dealing with premium rates or any other phase of the insurance question in which the public is interested. The only way in which the body politic is at all concerned in this subject matter is that the employe gets paid his reward. This can be accomplished with absolute certainty through the medium of properly organized interinsurance concerns, licensed casualty companies, or mutual organizations—all under state supervision and inspection. The employer should have the widest possible latitude of choice consistent with positively guaranteeing the injured employes and their dependents the benefits which the law provides.

By turning collective funds over to the state, what is accomplished of benefit to either party in interest? Positively no benefit, but, on the contrary, a mass of bureaucratic red tape and the creation of a political machine that will always seek to perpetuate itself in office at the expense of the industry, and to the great detriment of public welfare. The delicate problems of classifying risks, creating proper reserves, providing scientific inspection, suggesting wise, prudent and adequate safety appliances, are all to be taken out of the hands of skilled experts and turned over to a political organization. The politician, ever on guard for the interest of self or party, realizes that labor is organized and can vote as a unit; business is unorganized and, unfortunately, apathetic on election day.

As a result of this inevitable situation the law will be administered in such fashion as to gain favor from the class that can cast the greater vote—and this at the expense of industry, and of course at the ultimate expense of society at large.

Go with me for a moment and examine the methods suggested by those who advocate this so-called state insurance plan.

As a matter of fact, the scheme proposed is not state insurance at all. This phrase is a misnomer. Masquerading as state insurance, the plan does not provide for the payment of compensation generally by the state from general revenues, but the state merely accumulates a fund by taxing certain industries which it disburses to employes injured in the taxed industries. Let us take a classical example, the state of Washington act.

This act provides compulsory compensation. Every employer engaged in any occupation classed as hazardous is taxed on the basis of his annual pay roll a percentage fixed for the class to which his occupation is assigned. The premiums obtained from the tax on employers of the various classes are not lumped in a general fund and used in the payment of all claims for compensation arising from all the risks, but the tax paid by the industries in each of the classes is segregated and used in paying claims arising from the industries embraced in that class. If at the end of the year there is a deficiency in any fund the employers contributing to that fund are to be called upon to make the deficiency good.

It is to be noted that the law creates a mutual liability. The employer who uses the highest degree of care in guarding against accidents is forced to stand for the losses of poorly equipped plants and reckless management. Each industry of a particular group must pay the same rate, and this without regard to the hazard of the several plants. No opportunity is offered to induce the employer to reduce the rate of insurance by improving his plant and adding provisions for the safety of his employes. The inevitable effect of such a law will be to discourage the adoption of safeguards and so actually increase the risks under which the employe must work. As I recall it, there are forty-seven groups or classifications of industries. This means forty-seven involuntary state mutual insurance organizations managed by state officials far removed from the operating plants. In the event of injury the employe submits his claim to the political adjuster having charge of that particular group. The endless red tape of bureaucracy is set in motion and after weeks of delay the matter may or may not result in adjustment.

The Washington law is now pending in the Supreme Court of the United States. The matter went to the Supreme Court growing out of an accident in a powder mill in the state of Washington. There were five mills in the classified group. These mills were mutually obligated to each other as against accidents: In all there were 196 employes in all the mills combined. Of this number the Dupont mills had 160. The Dupont mills were well equipped and carefully managed. No minors were employed in the dangerous phases of the work. In the mill where the accident occurred minors were employed and the plant was not properly equipped with safety devices. An accident occurred and several children were killed. The amount due under the act was $8,259.35, of which amount the Dupont plants were obligated to pay, under the law, $7,598.50, or 82 per cent of the total. In the hands of the political treasurer of this insurance group there was exactly $463.27 with which to pay this loss. Under the law the Dupont plants were assessed to make up the deficiency. Hence the test of the law in the courts. In the meantime the unfortunate parents of the dead children wait empty handed.

The above is a classical example of the folly of this law.

If the powder plants operating in Washington had been under a

compensation law of the New Jersey type, each being compelled to carry insurance in regularly licensed concerns operating over the entire country, and thereby having sufficient risks to establish a scientific average, the situation that confronts the Dupont people could not exist.

This law treats the relation of the employer and employe not as wholly public in character but as wholly subject to domination by the state. The employer can make no contract with his employe as to compensation to be paid in case of injury; the state makes that for him. In case of injury the employer can not make settlement with and payment to his employe; the state takes that right to itself. The whole administration of compensation has been taken into the control of the state. However, the state assumes no financial responsibility. The plan is un-American—paternalistic and calculated to discourage real progress along lines of correct, just and equitable workmen's compensation laws.

A commission of the federal government which for months considered the subject and compared the acts of our several states and the laws of European countries, and heard exhaustive arguments made by those advocating a system of insurance administered by the state, unanimously reported against such a plan. In its report that commission has said in substance that it was influenced to this view for the reason that if the individual employer was made responsible simply to his own employes (either directly or through insurance with competing companies where there is a chance of securing preferential rates for safe and humane management and equipment) the effect would be to influence him to exercise more care in the conduct of his business, in providing safe machinery and careful fellow workmen, which incentive would be lacking if he were merely taxed or assessed for a common fund.

Further, that compelling the owner of the modern, well equipped plant to contribute to pay for the injuries and death inflicted by inadequate and carelessly managed plants could work an injustice and would amount to a premium on carelessness and a penalty on good management.

In considering the matter under discussion we should not confuse the matter with social insurance schemes now being agitated, such as old age pensions and unemployment insurance. These are purely social movements in which society at large is interested.

We all agree that in principle workmen's compensation is right and should be adopted, but it is peculiarly a subject that should be removed as far as possible from politics.

"The trail of state insurance is uncharted. Its course runs perilously close between the Scylla of Socialism and the Charybdis of organized graft."

The employer should not be forced into the insurance business and then be compelled to accept a political management.

Why is it that interinsurance has proved such a success? Is it not due to the fact that the risks are selected and the management in experienced and skilled hands? How long would one of these organizations last if turned over to a lot of politicians to handle?

The whole doctrine in reference to workmen's compensation is new to this country.

Industry in a large sense is still more or less in its infancy in the western, northwestern and southern states.

Now if we are to accept this new industrial principle of compensation why should we go further and superimpose on this new departure the experiment of state insurance?

Exclusive state insurance has never been tested up to this very hour save and except in Norway, and in that country a constant deficit stares the people in the face, a deficit that must be made up from the general revenues of the nation.

It is also important when we are discussing these economic and social laws that we keep in mind the fact that our civilization and business environment are vastly different from similar situations in foreign countries. Anyone at all familiar with the important subject of insurance knows that it takes many years to acquire that kind of experience that will demonstrate that a given insurance plan is well grounded. How long will it take a state to prove to itself that this political insurance plan is a success? And if it should prove a failure the handicap business would be under and the disaster accruing to the whole people would be very great.

Consider this thought for a moment. In adjusting claims the political adjuster would have on the one hand the business interests of the state to consider and on the other hand labor unions to deal with; that is, if in a given sense the laborer felt that he should get more liberal treatment than was accorded him the politician would be running the risk of the disfavor of the union to which that special laborer belonged. We know from experience that in politics much goes by favor. This condition would be intolerable from a strict business standpoint. Then why run the risk of it when there is no need, and especially in view of the fact that the great principle of workmen's compensation is not at all dependent upon state insurance? If we are to test state insurance then it should be elective, as in Massachusetts and Michigan. That is, the employer has the privilege of coming under a state insurance plan, or carrying his own insurance, or carrying his insurance in inter-insurance or licensed companies. Under this theory if state insurance is the most effective it will prove itself and will gradually push aside all other methods. If it is not effective then no very great harm could have been done.

"In all matters of social reform and betterment it is difficult to find the golden mean between doing too much and doing too little, but this mean must be found, or, in the end, what was a blessing will become a curse."

I regret that time limitation will not permit me to discuss this matter at great length. I should have been pleased to go into the character of a law which in my judgment would best meet the needs of the industry. This I can not do. However, permit me to urge upon you seriously to have a committee appointed and that the business of this committee be to make a careful examination of the laws that have been spread upon the statute books, and from such study and investigation draft a model bill. In this connection I seriously recommend your consideration of the New Jersey law and the Michigan act, because I feel that these two measures, in a general way, comprehend the best thought thus far conceived touching this important subject.

If you appoint a committee such as I here suggest this committee should evolve some plan whereby the representatives of labor organizations could be met and conferred with, because I know that you are just as much concerned for the interest of the employe as you are for your own interest.

These acts should be so balanced as to safeguard business as well as labor. This can be done, my friends, if business men will but bestir themselves.

I wish that every word of Mr. Cruikshank's speech could be emblazoned upon the hearts of the business men of this nation. I was indeed gratified to have the privilege of listening to him. He has pointed out to you the great and crying need of the hour.

The important problems of business should be adjusted by business men and not by politicians. Compensation laws should be moulded by the needs of business and not by the vagaries of self-serving politicians.

Attack on the Wooden Car

On June 17 a bill was introduced in Congress by Representative Roberts requiring railroads to substitute steel for wooden passenger cars. The purpose of the bill is to insure greater safety; but if the bill becomes a law its effect will likely be the opposite. Steel cars are not as safe as those of wood in case of wreck, except that they are less likely to burn. The metal crushes and buckles under impact where wood's elasticity may save it from crushing. Passengers have a better chance to escape from a crushed wooden car than from one of metal in the same condition. Aside from the element of greater safety, the wooden passenger car is preferable in other ways. It is more elastic and yielding, consequently it rides more smoothly. It is cooler in summer and warmer in winter, and it weighs less, making the train easier to handle. If Congress undertakes to legislate wooden passenger cars out of existence, many good points in their favor will be brought out which have not been given due consideration.

Available Foreign Hardwoods

THIRD ARTICLE

AFRICAN HARDWOODS

Editor's Note

Following is the third of a series of articles on foreign hardwoods available for use in this country. The first article covered hardwoods available in the Central American countries; the second covered hardwoods available in South American countries and the fourth will cover hardwoods of Ceylon.

A great part of Africa's wealth is derived from its timber resources. This natural production has, for a number of years, contributed to the wants and necessities of European countries in which the forest resources are insufficient to supply the demand for fuel and industrial purposes. This is true particularly with respect to the hardwoods used for furniture and interior finish. While millions of feet of structural timbers from the United states and northern Europe are shipped into Africa annually, a still greater bulk of fancy woods are extracted from the tropical forests of east and west Africa and shipped to England, France, and Germany, where these timbers are re-distributed and shipped to other points in Europe and the United States. The poet, Cowper, once said that "each climate needs what other climes produce." Though the forest products of the United States are vast and extensive in themselves, Africa as well as other tropical and sub-tropical countries furnish us directly with many of our most valuable and indispensable timbers of commerce.

In this age of research and enterprise much has been said upon utilizing and economizing forest products which have hitherto been considered as waste. This study has been thoroughly made by a number of men and has been brought prominently before the notice of those who have capital to test their worth. The closer the utilization of our own forest resources the less we will have to depend upon the resources of foreign countries. The industrial application of wood of all kinds is rapidly increasing, however, and the demand for foreign woods is very likely to increase very materially during the next few years. A number of large importers have already turned their attention to West Africa for certain classes of timbers, principally mahogany and ebony-like woods, with which the forests abound. Much has been done in the line of geographical exploration, the results of which have been very advantageous, for they are the only means whereby a knowledge of the forest resources of these more or less obscure West African colonies can be obtained, and the extent and kinds of timber trees suitable for exploitation be determined. But even now much lies hidden from our knowledge, which is more or less the case in all tropical countries. Germany was one of the first of the countries to recognize the importance of investigating the forest resources of both East and West Africa. The forest conditions of Togo and Kamerun have been carefully investigated, and it has been found that much of the surface is covered by dense forests in which there is a great variety of different woods. About 600 species are found here, but there are no extensive forests in which any one kind of timber predominates. Lumbering operations with the aim of gathering any one variety cannot be carried on with any degree of economy. The same can be said of the French, English, and Portuguese provinces in West Africa.

Little is known of the interior of the Belgian and French Congo. A number of adventurous travelers have crossed these dense interior forests, and about all that is known now is that forests exist and that it is almost impossible to traverse them. The forests of German East and German Southeast Africa have been mapped, and while the composition is not well known the density of these forests is much less than those in West Africa.

The English have attempted to make a survey of the forests in the African colonies, and some of the best timbers are now exploited and shipped from the ports of West Africa. There is very little available timber in South Africa and in British East Africa. While there are forests in the Soudan they are practically inaccessible. Northern Africa can be neglected from the discussion, for the reason that there is very little available timber and large quantities are imported from northern Europe. The cork oak is, perhaps, the most important tree in northern Africa, but its value does not lie so much in the timber it produces as in the cork it yields.



TYPICAL GROWTH OF INCENSE TREES ON A DRY ROCKY RIDGE OF WEST AFRICA.

In looking over the long list of really good woods from West Africa, one is led to believe that many of them will become of great commercial importance; indeed, many of them are already known. The west coast of Africa will be the only producing region for many years to come, because of the difficulty of opening a free communication with the interior of Africa. The difficulty of obtaining suitable labor, which is so great a drawback in many countries, as well as the great expense of transportation, all militate strongly against the prospect of the interior of Africa being opened at present for its timber resources.

The bulk of the forested land in many parts of West Africa belongs to the native chiefs, but term grants, or leases, are frequently taken out by white men with the consent of these chiefs. The leases cover anywhere from 10 to 400 square miles and allow the cutting of any timber the lessee may desire, with the exception of ebony and of mahogany under twelve feet in circumference. Both of these names are comprehensive terms and there are no less than ten or fifteen different species of trees now cut as mahogany and about six are said to produce ebony. There are only from one to two merchantable trees to the acre in many localities, which makes the building of a tram road uneconomical. In addition to allowing no small mahogany to be cut, the law in some colonies provides that twenty seedlings shall be planted for every tree felled. This is a provision which is seldom adhered to.

The hardwoods of West Africa form the great bulk of the forests and among these the heavier sorts are most common. About one-half of the available timber is regarded as of distinct industrial value. The exact value of many apparently good timbers cannot be definitely determined until the timber has been tested more fully. In order to make lumbering operations profitable the timber should be sawed into lumber in the forest and shipped to market in this shape, because this will save a good deal of labor and expense in transportation.



THE COTTON TREE YIELDING THE CORKWOOD OF EAST AND WEST AFRICA.



CORK OAK OF NORTHERN ALGERIA.

Gambia, or African mahogany (*Khaya senegalensis*), is perhaps the most important tree in Africa from a commercial standpoint, and has a very extensive range of growth. It has been exploited for more than twenty-five years and its timber has been one of the chief sources for Sierra Leone, Lagos, Kamerun, Angola, and parts of Congo. The tree is found also in the upper Nile region, especially in the sections known as Djur and Nyssaland, but it is rare at this distance from the coast. According to authentic references in botanical literature, this tree is very common in the neighborhood of Cape Verde and along the Gambia river, where it is called Gambia mahogany by the English colonists. In the French provinces the tree is known as cail, or cail-cedro. The negroes of West Africa have named it "hie," "jallow," "dubina," and "oganwo."

Gambia mahogany is among the largest and most beautiful trees along the coast of Gambia and on elevated parts of Cape Verde peninsula. It is very abundant in the district of Bargny, where it forms the principal stand of the forests. In Senegal this tree is now being planted on a commercial scale by the French, because it produces a very valuable wood, which has attained considerable importance in the trade. Upon the whole there is scarcely a tree in West Africa which deserves more attention; for, when the beauty and usefulness of its wood are taken into account there is no other tree that can compare with it.

African mahogany is a name given to a good many other woods that are now being cut and sold, but the name "Gambia" mahogany is applied only to the wood of *Khaya senegalensis*, which is prized beyond all others as a substitute for the genuine mahogany (*Swietenia mahagoni*). Gambia mahogany is a large and very beautiful tree and yields one of the most abundant and useful timbers. It frequently attains a height of over 100 feet and an average trunk diameter above the enormous buttresses of over three feet. The tree is usually perfectly straight, so that splendid and most valuable boards may be cut from the logs. The wood is best suited for carpentry and cabinet work, and is used extensively for making handsome and expensive furniture. In color and figure it often resembles the true mahogany of tropical America, but it is somewhat softer, paler, slightly coarser, and is more liable to check in seasoning. The natives make boats of great strength and durability out of single logs of this tree. The tree yields a gum which was formerly collected and exported as a substitute for gum arabic.

The West African mahogany trade began in 1886, and the industry has attained such proportions that the output of tropical American mahogany has not increased in spite of the fact that there has been an enormous enlargement in the use of so-called mahogany. African kinds are shipped into the United States in large quantities, and the best grades are cheaper than similar grades of the true mahogany from Cuba or Mexico. The wood is somewhat paler red and works with greater difficulty than the tropical American mahogany, and is less valuable on this account. Since the tree is so widely distributed and the wood procurable in such large quantities and at so many ports along the west coast of Africa, it has come into extensive use both in Europe and in America. Some of the logs are beautifully figured and the wood is highly esteemed for the best grades of furniture.

It is difficult to predict what the prospects for the Gambia mahogany will be in West Africa ten years from now. The supply seems almost inexhaustible, but it is more than likely that the easily accessible trees will soon be cut and inferior substitutes will take its place. No less than twenty other species, most of them entirely unrelated, are now being exploited and shipped

to the large markets under the name of African mahogany. Many of them are very good woods, but all of these imitations now sold under the comprehensive trade name of African mahogany are deficient in some of the estimable qualities which characterize the original African or Gambia mahogany.

It is practically impossible to secure accurate statistics of the kinds and amounts exported from the various shipping points. That the industry, as a whole, is increasing is chiefly noticeable from the figures of imports of so-called African mahogany into this country. Out of the total quantity of true and substitute mahoganies imported during 1910, which was 44,524,000 board feet, about 19,000,000 feet were African substitutes.

QUANTITY AND VALUE OF TRUE AND SUBSTITUTE MAHOGANIES (UNSAWED.) Imported from 1901-1910.

Year.	Quantity M. feet.	Value.
1901	32,281	$1,752,612
1902	44,795	2,361,483
1903	48,387	2,783,679
1904	50,370	2,690,382
1905	31,844	1,977,894
1906	36,619	2,470,072
1907	51,899	3,263,718
1908	41,678	2,566,954
1909	39,828	2,479,976
1910	44,524	3,224,152

A number of other entirely different woods are shipped from various parts of West Africa to the timber markets in Hamburg, Liverpool, and London, and sold as African mahogany. These woods have attained considerable importance in Europe and are also gaining in popularity in this country. There is still a good deal of doubt as to the particular region in Africa the majority of these woods come from or what species produce them. In the northern regions of West Africa—Senegambia and Sierra Leone—it is doubtless *Khaya senegalensis*, but in the southern provinces of Kamerun, Gaboon, as well as parts of Togo, the supply of mahogany comes from a tree botanically called *Chlorophora excelsa*. This tree belongs to the mulberry family (*Moraceae*), and the bulk of this wood which comes to the European market is from Kamerun.

It is still doubtful as to whether the African form of *Carapa guianensis* supplies any of the so-called mahogany. The wood of this species is commonly called crab-wood in British Guiana in South America, where it grows also more or less abundantly, and is now being exploited and sold in the American and English markets as Demerara mahogany. Although related to the true mahogany it is much inferior and does not command a very good price.

Chlorophora tenuifolia is a very important tree and the wood is generally known as amoreira (mulberry tree) by the inhabitants of West Africa, where it is used extensively for lumber. The trees attain a height of from 100 to 125 feet and a diameter sometimes of ten feet or more at the base. This wood is regarded as one of the best of the West African timbers and is used for making all kinds of furniture and construction work. All the logs of the tree are sold as mahogany.

Chlorophora excelsa is another species of this genus that enters into the commercial supply of mahogany in Africa. It is known among the natives as odum or muambacamba. The wood is excellent for furniture and interior finish and its supply is almost unlimited.

Entandophragma angolensis grows very abundantly in Angola, West Africa, and particularly on the slopes of the Sierra de Queta mountains. This tree, which is popularly known as quibaba da queta, grows very tall, often 125 feet high, and yields the most desirable wood in Africa.

Khaya anthotheca also grows in Angola, in the forest of Mussengue, Golungo, Alto, and in the region of Hungo, West Africa. This tree is very large and yields a very good wood, called quibaba do mussengue.

Detarium senegalense is not a very common tree, but it yields a wood which has been exported from southern Nigeria and sold on the Liverpool market as dita mahogany. The natives of Nigeria call it dita or dupwi. It grows to a large size, with a bole of thirty feet in height to the first branches and about four feet in diameter at the base. The grain is not of so close a texture as is usual in true mahogany, but it has a very good color.

Afzelia africana of the Gold coast, yields a timber that is very hard, durable, and of first-class quality; it has been frequently exported to Europe from the Niger under the general trade name of "African mahogany," or opapao, and is largely used on the Niger for making furniture. Altogether this species appears to have a great future before it, not so much, perhaps, for purposes of export, as for local requirements in the arid regions of the hinterland.

Trichilia emetica from Portuguese East Africa, is pinkish-gray and very light in weight (40 lbs. per cubic foot), rather open texture, working to a fine surface. The pores are unusually large and long (almost as in teak) and contain a woolly pith. It is a useful light timber, obtainable throughout the province, especially southward.

Okoume (*Boswellia kleinei*) next to Gambia mahogany, is the most important timber tree in West Africa. It has a wide distribution extending from Togo to Portuguese West Africa. The tree attains enormous proportions and is said to reach merchantable sizes in forty years. Its trunk, which is provided with large buttresses, produces a very regular column measuring from twenty-five to fifty feet to the first branches. Its diameter is often from four to six feet. The weight of the wood varies from twenty-eight to thirty-two pounds per cubic foot, and from an industrial point of view is a rather coarse wood, which is used for all purposes of mahogany. It is often called cedar in the trade and possesses some of the qualities of the Spanish cedar of the West Indies. Okoume is now often used for making cigar boxes and for all the purposes of fine joinery, cabinet work and fancy turnery work in which a nice appearance and light weight is required. Okoume has been imported into this country for nearly fifteen years, and Germany is using large quantities annually. It is said that between 60,000 and 70,000 tons are used in Germany and again as much in France and England.

The moabi, oloun, or noungou (*Baillonella toxisperma*), has an enormous trunk often from seven to ten feet in diameter and from 100 to 125 feet in height. This tree is equally as abundant as okoume, attains larger proportions, and yields a wood with superior working qualities. The wood is hard, moderately heavy, reddish-brown in color, and is eminently suited for all grades of furniture and cabinet making. This timber grows along the water courses and is, therefore, readily accessible. Logs can be brought with little difficulty to the coast where they may be loaded on steamers. In the southern part of French Congo this timber is found in great abundance.

A slightly taller tree, from three to six feet in diameter, distributed in irregular groups, is the cynometra (*Cynometra floribunda*). This tree is confined principally to the courses of large and deep rivers or lagoons, which serve in bringing this forest region in communication with the coast. The wood is hard, heavy, and has a dark-red heartwood, which is occasionally substituted in France for the Brazilian rosewood (*Dalbergia nigra*), which it resembles very closely.

The tree commonly called coula, ignoumon, or koumongou (*Coula edulis*), is next in importance. It is relatively abundant in the forests bordering the water courses, where this wood attains a height of from eighty to one hundred feet, and an average diameter of three feet. The wood is hard, heavy, close and even grained, and is reddish-brown in color. Although the wood is relatively hard, it works well and is used for furniture and cabinet making. Coula has not been exploited to any great extent, but it will soon find its way to the English and French markets, where all little-known woods are critically investigated before they become a factor in the timber trade.

Bimo (*Mimusops sp.*) is tolerably good finishing wood and is occasionally found in the French markets. It is sold for mahogany, but like most other so-called mahogany woods it has little resemblance and no relation to the true mahogany (*Swietenia mahagoni*) of tropical America. Bimo is very hard, heavy, and

dark-red or brown in color. It takes a very good polish and is employed in turnery, and is valuable for purposes of construction.

Santalwood of commerce (*Pterocarpus erinaceps*) is occasionally cut for lumber, but it is chiefly remarkable for the valuable dye substance which it contains in its heartwood. The wood is hard, moderately heavy, and bright red. It is so closely related and resembles the other chief dyewoods of Africa that it is often difficult to distinguish it except by means of the compound microscope. The wood, which is used also as a substitute for rosewood, is called Senegal rosewood in the English possessions of West Africa. This species is confined chiefly to the open forests back of the dense timber belt fringing the rivers and lagoons. It attains its best proportions in French Congo.

Another red wood quite common in this part of Africa is odwen of the natives or the cam wood of commerce (*Baphia nitida*). Cam wood has gross characters that are nearly similar to santalwood, and is used also for dyeing or coloring. It is very plentiful in some of the tropical evergreen belts of vegetation along the water courses, but it scarcely attains the dimensions of a valuable commercial tree.

The mandji, or eloun (*Oldfieldia africana*), which is known in the trade as African oak, is a gigantic tree with a colossal trunk, often attaining sixty feet to the first limb, and from three to five feet in diameter. The wood is very durable and easy to work. It resembles very closely the wood of fine black walnut, and is often shipped to the English markets as African walnut or African teak. It is somewhat heavier and harder than black walnut and can be readily distinguished by its denser structure.

Another tree which attains noble proportions is the oba, or andok (*Irvingia gabonensis*). The wood of this tree has not been exploited, but its light yellow color, fine grain, and beautiful polish which it takes, render it a very desirable wood for cabinet and furniture work.

A substitute for mahogany, known by the natives of Sierra Leone as kino, boi, or okwen, and in the French Congo as issanguila, or engassang (*Ricinodendron heudelotii*), is a large tree, plentiful especially in the mixed evergreen and deciduous forests which occupy the well-drained areas. This wood has been exported from southern Nigeria and sold as African mahogany. The wood is moderately hard, of medium weight, fairly close-grained, light yellow, and very easy to work.

Brounzi (*Pentadesma butyracea*) is another important species of timber trees found in the wetter portions, especially of French Congo. It is a lofty tree scattered among those of more moderate dimensions. The crown of this giant of the forest is usually small and irregular; the trunks are almost cylindrical and often from fifty to sixty feet to the first limb. The wood is hard, heavy, and light-brown in color. The wood is of extraordinary good quality and is used extensively in buildings for beams, rafters, and also for piling. It is also used in the form of boards, only it must be carefully seasoned or they will warp and twist somewhat similar to the black gum of the south Atlantic states. It is a very valuable wood for hydraulic works, because it is very durable under water, but in contact with lime it is very perishable. The specific weight of the wood thoroughly air-dried is 0.850. This wood is highly esteemed in West Africa on account of its durability and comparative ease with which it may be worked. The price of the wood on St. Thomas Island, West Africa, is about $50 per cubic meter, except in the form of timbers thirty or more feet in length, when it sells for $90 per cubic meter. Oba is not affected by the termites. The tree is also noted for its fruit which yields vegetables, oils, and fats. L. L. D.

National Problems We Must Face

Editor's Note

The following address was delivered by Harry A. Wheeler, president of the Chamber of Commerce of the United States, before the sixteenth annual convention of the National Hardwood Lumber Association held at Chicago, June 5 and 6.

You have been a member of the national chamber or, as we call it, the Chamber of Commerce of the United States of America, for about a year. I doubt whether you know much concerning it, and while I am not going to recite in a stereotyped way the things which we are trying to do, I am going to concentrate the time I have at my disposal, through your courtesy, in giving you what seems to me the important relationship of the commercial interests of this country to the general problems of our day, through this national organization of which you are a member.

Now, your organization, great as it is, and standing for so much, is not a preacher of a day. Organization is the evidence of progress and prosperity in any nation. A savage nation needs no organization save only that defensive organization of their personal property and their homes against the invasion of an enemy. Nations that are sparsely settled or developed only in a small way commercially and industrially need no organization save the defensive, because they have not reached the refinement of civilization which demands the class and character of co-operation which your organization exemplifies.

It is only as nations gather together the great productive value of their fields and farms and mines and forests and the productive or converted value of their mills and factories, finding themselves building a complex civilization, that organization becomes necessary as a refinement of the progress and the prosperity and the industry of a nation. So it is that in the history of this country, from the earliest days, when a few men in a given line of trade, or a few men in a locality, came together and united for a common purpose, they found benefit in this gathering together of the few and the development of subjects for study and consideration that demanded the expansion of that character of organization and so you have step by step the refinement of commercial organization, from the small group into the state group, into the national trade group, and from the small community into the state federation, and so on into the national federation. There is a perfectly logical chain that carries itself through the entire history of our commercial development, which led, up to the present time, in the organization and maintenance of such great organization as yours and such great community organizations as exist in the larger cities of this country.

All of that effort was most beneficial. It came about as an absolute necessity that the interests of a line of business be protected by the co-operation of those engaged in that line of business, against organized effort, which is always against your line of business by those who take the other side, whether they be competitive in the sense of a commercial antagonist, or whether it be that great popular opinion which, unfortunately in the last few years, has come to be against business of all classes; it is nevertheless the incentive that has occasioned the organization of trade bodies and community bodies and their refinement, finally, into the Chamber of Commerce of the United States of America.

Now, why? Your organization may speak with all authority with respect to the problems that are yours, problems that affect your daily life, that affect every day of your business lives, that affect your prosperity, but when your voice is expressed in behalf of those problems in a state legislature or the National congress, it is taken as the voice of an interest in its own behalf, and its advice is certainly set aside or diminished as a result of the conclusion on the part of those to whom you address your requests that you are for the interest which is yours and for your profit in that interest, and therefore a selfish appeal has been made. Remember this is not my conclusion. I say that trade organizations over the country have been given more

unselfish advice than perhaps any other class of organizations, and more intelligent counsel, but it has always been considered by the other fellow to whom the advice has been given that it arises from a selfish interest, for selfish purpose and to gain or achieve a certain selfish end.

The San Francisco Chamber of Commerce may appeal to Congress for that legislation, national in character, which will benefit the state of California, or the city of San Francisco, but that appeal from San Francisco will be taken with the same grain of salt and will be tainted with the same claim of selfishness. Your association and all trade associations alike in the claims which they make for consideration have that one common enemy of all organizations, the public opinion, created unjustly and unfairly in the main, which has for its basis of argument the selfishness of the request made. And there is no possibility of gathering together these respective units that represent the commerce of the country, unless you form a national organization as the ultimate refinement of the community and the trade organizations representing all business interests and permitting the American business men to speak as a unit upon the questions which are not local, which are not devoted to a single trade, but which absolutely are national, and yet in their national character as intimately relate themselves to your business and mine, as though they were a part and parcel of our daily life.

That is the reason, gentlemen, that in the national conference that was called in April, 1912, orders were given to create the Chamber of Commerce of the United States, in order that the business men of this nation should have one organization through which they might speak on the broad questions of our day, concerning which I wish to invite your attention for a moment.

I am not a pessimist, but rather my contact with men over this entire country leads me to believe that pessimism has no place in the business world and no place in the business mind; but I believe that today this country faces a definite crisis, very different from the crises of the past, in that it has nothing to do with the acquisition of territory or the laying of foundations of the government, or of the building of a constitution, or the freeing of the enslaved portion of our people, but just as definite a crisis as any crisis that has confronted the American people in the past. It is economic. Therefore it is your problem. It confronts the nation today so strongly and strikes so sturdily at the foundations of business that unless the problems are solved, progress and prosperity and a continuation of the splendid history which this country has made will stand absolutely still and then begin to retrograde; for you cannot neglect further these problems which strike so intimately at the commercial development of our country and which, in the last analysis, if allowed to go unchallenged, will set up definitely two camps, one against the other, that of the employer and that of employe, out of sympathy with each other, out of harmony, out of touch and out of contact, believing that unfair methods prevail, and will therefore invite revolution that would be very detrimental to all of our commercial interests, and to our government as well.

The test of the permanency of a democracy such as we have established on these shores lies in a right solution of these economic questions that during the last ten or twenty years have multiplied and pyramided without a solution, until today we have them by the dozen, and it is absolutely necessary that we should consider them and endeavor to solve them. To my mind they group themselves in three sections: There are the economic problems purely; there are the trade problems purely, and there are the social problems.

I want to speak to you in a very brief way of three, under each head. Of the economic problems the three are these: The regulation of our domestic commerce and the control of our domestic corporations; the revision of our banking and currency laws, to provide for flexibility of currency and of credit, and a method for the revision of our tariff from this time forward that shall be scientific, based upon the experience of other nations older than we in this particular thing and calculated to do away with the unrest, the uncertainty and the loss which result from the constant and repeated threats of radical revision such as we are undergoing at the present time. Those are the three general economic problems that are business and yet they are political in that every single one must be solved by legislation, and who is going to write the bill?

Our Congress is made up very largely of men in professional life. Are they competent to determine your problems? Are they competent to judge without your counsel and advice how far they may go in safeguarding the interests of the people as against the commercial interests without undermining the very business which you are doing and which you own? No. Neither is it right that we, as business men, should expect the Supreme court of the United States, chosen not for the purpose of sitting as judges over common, ordinary business disputes, to be compelled to interpret the Sherman law and its actual operation or application to every industry to which it is applied. It should be its business to construe much higher and weightier problems relating to government, our nation and our relation to the other nations of the world. We must have a revision either of opinion or a writing of a brief that business men may run and read, or an amendment of the law which regulates our domestic corporations to a point that they shall not be jeopardized, either in the conduct of their domestic business or in competition with great foreign corporations in the markets of the world. And that law will be written in December or during the winter of 1913 and 1914, in the regular session of Congress, and it is your problem as to whether that law shall be wisely written, under your counsel and judgment and advice, or whether you will allow, as we have so often done in the past, our professional friends in Congress to make the law and then suffer under it until it becomes unbearable.

The banking and currency question is your question. I am a banker by profession, and while business men uniformly over this country say that is a banker's question and the banker should settle it, I say to you it is not a banker's question. That it is your question and it must be settled in your interests or it will be settled in a manner that will be inimical to your interests. The banks can get along. We will operate under the law; we will build up our reserves, anticipating times of trouble; we will hold our funds available for the use of our depositors and for their demand, when that demand comes. If we have a circulating medium that is sufficient to answer all purposes, well and good, but if that circulating medium falls below the safety point, the bank is not going to be hurt. You are going to pay a price for your money or you are not going to get it at all, and your business will be curtailed because of the absolute inflexibility of our present banking system. Has it answered our purposes for fifty years? Yes, but fifty years ago this nation was not the nation that it is today. Fifty years ago it answered a purpose because we had government bonds in plenty, owing to the rapid changes that have come about, and to the expenditures that have been made to settle our national conditions, and today you are faced with an absolute shortage of currency because the medium upon which additional circulation is based is so limited as to be absolutely unobtainable.

What are you going to do about it? What is the asset upon which a flexible currency and a flexible credit may be founded? It is absolutely and only the commercial asset, the movement of goods in transit, the movement of goods in the warehouse, the storage of goods upon your shelves and on the road. That is the thing that is the basis of national wealth, flexible in character, converting itself quickly into money, and in good times and bad times infinitely more rapidly into bonds and stocks, infinitely more certainly, upon which circulation may be based.

The bill which is in Congress today, or will be there, I hope, in the month of June, will provide for that flexibility in that commercial paper and bills of exchange of certain classes and having a certain length of time to run may be discounted through the source created by law, and the bank having greater demands upon part of its customers than can be supplied out of its own resources, may be able to take its paper of the class stipulated in the law, rediscount it and supply the wherewithal to carry on the business of the community.

Do you say that will work an expansion that will be dangerous? No, it will not, for the only discounts that should be taken are short-time discounts, and they must be retired at maturity and they must be paid in the same character of notes that are issued, as the result of

their deposit, and there is a perfectly natural expansion and contraction of your currency that would prove a safeguard to your commercial interests and would make much easier, although possibly a little less profitable, the business of the banker.

Is that the business of the banker? No, that is your job. If out of this special session of Congress, in accordance with the plans of the president, there is brought forth a banking and currency bill for the study of the people, in order that we may test its provisions in their actual operation and as applicable to the commerce of this country, then we will find an easier condition this fall; but if there is no legislation to come out of the present session of Congress, not to be passed but to be presented for consideration, then you will find that the difference in interest rates that is natural and normal as between September and March will rule again this year, and the fact that we have not enough to go around will cause you to pay interest rates that will be very detrimental to your business. There is clearly as between the month of March and the month of September a normal difference of interest rate of one and three-quarters per cent. Ordinarily, in the spring of the year, money can be had in the open market at anywhere from three and one-half to five per cent. In the spring of 1913 there was no money from March on at a rate short of six per cent, and six per cent was the ruling of rates. If you will apply the normal increase in rate of interest for accommodations granted as between spring and fall you will find where the commercial interests of the country will get off as a result of the interests that they will be compelled to pay, owing to a shortage of money with which to transact business. That, I say again, is your problem, and it should be, if you will permit the suggestion, the business of this great organization to send your appeal to President Wilson, that his program for bringing out a currency measure in the special session of Congress shall not be deviated from. It is not a party question; it is not a political question; it is absolutely economic and one of vital interest to our business and your business, and we must have it or we will suffer the consequences in the late fall.

A short time ago your organization received from the Chamber of Commerce of the United States a referendum for the appointment of a permanent tariff commission. Tariff, gentlemen, has, to my mind, been the most abused subject that has ever been presented to the American people and most consistently misrepresented to the American people for many years past.

There is not today, in spite of the representations that are made in this country by our political friends, a possible chance that the cost of living will be materially reduced as a result of any revision that can be made, even the present logical downward revision. In thirty years in this country of ours we have advanced our circulating medium from fifty-two cents per capita to $8.52 per capita, yet every year the cost of living has increased, not declined. Last year more than fifty per cent of all the imports brought into the United States were brought in free of duty, yet we have no decrease in the cost of living. The cost of living does not depend upon revision of the tariff; it depends absolutely upon the economic condition of this country, upon the wreckless waste, the ruthless waste that goes on because of prosperous conditions where the man who at one time lived comfortably on half what he thinks he can live on today and saved more money than he can save today now believes that it would be a backward step for him to do the things that were common in the time of his early childhood or in the time when his mother and father were children.

I tell you that is the condition that brings about high cost of living, and we will not see a reduction until such time as the American people become conservative with respect to their expenditures, become economical in the use of their money and in their method of living and find a way back to the old time when we lived just as well, just as happily, just as healthfully on very much less than we think it absolutely necessary to have today.

Mark this: This organization that arises as a result of the threat of tariff revision has for twenty years cost the laboring man and the laboring woman more money annually than all the saving that has ever come as the result of lower prices due to tariff reduction. The loss of a week's wage of a workman that has a family is a greater sum than the entire saving that he will make by tariff reduction upon the articles that will enter into the cost of living, even though that may be as great as the present bill provides.

Now, that is a question which is before this American people, that has been always held up as the one thing that our people should pay attention to—"Vote for downward revision in order that we may have lower cost of living," and yet if the figures that I have given you are correct—and you have a right to verify them—they show that in spite of downward revision, in spite of the entrance of our commodities free of duty in the amount that I have stated, more than fifty per cent of our imports, it does not accomplish the thing that has been claimed for it.

Those are the three economic problems. Briefly, the three other problems are these: Our industrial life has increased in point of productive capacity to the practical point of supplying the maximum demand in domestic markets. In a highly prosperous year the manufacturer finds himself unable to fill the orders that come to his hands. He is compelled to call in his salesmen from the road because of the activity of business and the limited capacity of his mills. It hurts his feeling to think that he has lost the profit of a few dollars on sales and he proceeds to take all of the money that he has made during the year and all that he can borrow to increase the size of his plant in order that he may have the capacity equal to the maximum demand that can arise. That has been going on and on through the period of our industrial development until today, unless we have a domestic market that is supreme and up to the high-water mark, we are absolutely unable to run our mills except at half or two-thirds time.

What are you going to do about it? The only answer is that you must find a foreign outlet for the manufactures of this country. We are doing it—you say we are, but not fast enough. What we need as business men is that we shall insist that, in Washington, in the Department of Commerce, there shall be made by Congress an appropriation sufficient to intelligently carry on that work and to aid business, in finding foreign markets and obtain that information which will enable you to gain an intelligent comprehension of what the foreign markets need.

Our Department of Agriculture stands with tremendous appropriations that are absolutely right. For one I would not begrudge it a dollar or deny it a single dollar that it asks, for every dollar that is given to the Department of Agriculture makes possible the commerce of this country, and there can be no objection to the use of a paltry few hundred thousand dollars annually for the support of that department which represents the great commercial interests of this country, with the many millions of dollars incidental to the work of that department representing the agricultural interests of this country. If we expand our trade we are going to find it necessary to avail ourselves of the aid of the federal government in securing knowledge of trade conditions abroad so as to make it possible for our manufacturers to find those markets and to cultivate them and to retain them.

Another factor in this matter of trade development is reciprocity. You are not going to be able to sell the products of the United States in the markets of the world unless you buy something from the markets of the world in return, and there is much necessity that we should establish reciprocal relations between the nations of the earth to whom we expect to sell, and that is the only basis upon which we can expect to expand our trade to any considerable degree.

The third trade problem is that of the means of carrying our commodities to the markets of the world. We are carrying them today in foreign bottoms. We pride ourselves that we have a great balance of trade in our favor today. Last year the Department of Statistics told us that the balance of trade with us was $500,000,000, and we pride ourselves on the fact that there is a greater amount of gold coming into this country, in payment of the products which we ship out, than there is in payment for the products which we have to import. It is a fallacy. There are $500,000,000 in the balance of trade upon the value of commodities as recorded, exported and imported, with the Bureau of Statistics. There is no account

taken either of the cost of financing or the cost of transportation. There is no account taken of the enormous sums of money that go out to foreign countries as the result of investments in our securities, and I give you this as a fact: If you will add the cost of transporting commodities into this country and out again, paid to foreign shipping, if you will add the cost of exchange and of interest paid to foreign bankers to finance your foreign shipments, and if you will add to that the interest charges against the funds invested in this country and add to that the money spent by our tourists in the countries of Europe and over the entire world, your balance of trade in your favor has not only shrunk to zero, but by actual computation, there is a deficit of hundreds of millions which must be paid in gold out of our own coffers as the result of that program.

We have nothing to be proud of in that connection. Those are cold business facts that we, as business men, have to face, and we have to find the solution, and the solution is going to be the greater development of foreign markets, with the ability to lay down our products, not under the courtesy of a foreign shipping trust, but under the rules and regulations imposed upon an American merchant marine that will be operated in the interests of the American industry and that will fly our flag in every harbor the world around and carry our products likewise.

The third group that I call your attention to is the social group. I think you will agree with me that the wave of social legislation that is sweeping our country is one of the most threatening that confronts the business interests today—minimum wage, maximum hours, employers' liability, workingmen's insurance. Go down through all the realm of subjects upon which legislation is being thrust upon the business community, into state legislatures and into the national Congress, and we are face to face with the real problem. Now, because of our state sovereignty it is a physical impossibility that a uniform federal law shall govern those things that must be governed only by the operation of a state law. We may apply hours and wages and insurance and liability, insofar as the government's employers are concerned regarding federal legislation, but we cannot legislate as to what shall be done in the state of Ohio or the state of Illinois, because that is state sovereignty and state sovereignty must rule; but if we are to have a solution of this serious problem, it lies with the business men, such as we have in our organization, representative of every state in this Union, to see to it that, by some form of co-operation, through your national organization and ours, an effort shall be made to unify the state laws upon these subjects, that there shall be protection given to the workers to the highest possible degree that business will stand, but not that the laws of Illinois should be so different from the laws of Ohio or Indiana or New York as to put Illinois manufacturers at a serious disadvantage, from a competitive point of view, since they have not to contend with the charges that would go against us in this particular state.

There is where uniformity is an absolute essential, and I appeal to you as business men to take it into consideration and, insofar as you may, co-operate with us in an endeavor to unify the laws of the several states with respect to these social problems, so that from the viewpoint of competition, justice and fairness may be done to all of our commercial interests.

These are your problems, three problems that are economic, three that are trade problems, three that are social. How are they to be solved? They are to be solved only by the advice and counsel of the business men of this country, in conjunction with the legislative skill of those whom we send to our legislatures and Congress to make our laws; and if we withhold that counsel and advice we will suffer the result of legislation that is inimical to our states and that will be distinctly of a character to undermine our national prosperity.

We stand in this country as holding advanced views. We believe that we are going to set the pace in social legislation for the thing that will guide other nations. A few days ago there came into my possession a publication by a very prominent social economist and scientist of Germany relative to the operation of social legislation in Germany, at the present the most advanced nation on the globe in that respect, and this is what he said:

"Care should be taken in the passing of social legislation lest by the creation of a paternalism on the part of a government the workman, who is the backbone of a nation, becomes a spineless thing, without initiative, without aggressiveness, and rests back upon his government for protection in all things that relate to his well being.

"There is the thing that we, as business men, should guard. That social legislation should not be opposed, because it will impose a tax upon our business, but that social legislation should be encouraged, insofar as business can stand the tax, always however looking to it that no legislation be passed calculated to take away the manhood of the man who makes the back bone, the fiber and the sinew of our country, and our task is the protection of his interest. The workman will go as far as the radical legislature will permit. It is for us, as sane, common sense business men to try to find a fair ground, and when we have found that ground of equality and fairness and justice to ourselves and to our workmen, to endeavor to impress upon his mind that viewpoint, in order that harmony and good will may be restored.

"In conclusion I want to thank this organization for the support which it has given the Chamber of Commerce of the United States. I want to tell you that that organization is not our organization, Mr. Caldwell's or mine; that it is not some intangible thing that has a name but not an existence. It is made up of you; it is doing your work, it is studying your problems; it is trying to find a solution of those difficult questions which today are confounding many lines of business. Give it further support, and as you are requested from time to time to record yourselves with respect to referendums that are presented by that organization, believe this: Every referendum will be a pro and a con. The argument that is made against a question will be just as jealously couched, just as carefully drawn as the argument for it. Educationally you will be able to find both sides of every question in any referendum that may be submitted, but the value of it all is this: When the business men of this country, now affiliated with the Chamber, representing more than 350 of the greatest organizations which this country has produced, representing an individual membership of more than 200,000 business firms or business men, when we present to the President or to the Congress at Washington a decision that has been made upon any question as the deliberate vote of the business interests of this country, after a referendum, it is bound to have weight; it is bound to have influence and it will bring about that which we have all failed heretofore to get, a hearing, on the ground that we are now, for the first time in the history of our country, representing the union of business America.

Remarkable Growth in Cement Manufacture

A warning to lumber manufacturers is seen in the remarkable growth in the Portland cement industry in the United States which has been so rapid recently that its relative standing among our great industries is realized by few even of those directly interested.

Its importance, both commercially and financially, is perhaps best brought out by comparison with the American iron industry, whose standing is everywhere fully understood. The following table, compiled by E. C. Eckel of the United States Geological Survey, gives the output of pig iron and Portland cement in long tons during every fifth year from 1880 to 1910, inclusive:

Year.	Pig iron, long tons.	Portland cement, long tons.	Percentage of cement to pig iron.
1880	7,749,233	7,000	1
1885	7,415,469	25,000	.3
1890	9,202,703	56,000	.6
1895	9,446,308	165,000	1.7
1900	13,789,242	1,414,000	10.3
1905	22,992,380	5,874,469	24.3
1910	26,674,123	12,986,152	48.7

Profitable Lumber Advertising

GENERAL POINTS FOR ADVERTISERS

Editors' Note

This is the sixth and last of a series of articles on how to write lumber advertisements, the first being a general article on the subject, the second on "Writing Copy," the third on "Points About Writing Copy," the fourth on "Borders, Headings and Layouts," and the fifth on "Mediums."

In the foregoing articles, the first principles of advertising have been given, and from them can be built up a thorough knowledge of the game. Remember, you can get no new ideas of merchandising in the lumber business—you must get your ideas from other lines of trade and make them applicable. The reading of such magazines as Printer's Ink or Advertising & Selling (they are virtually the trade-papers of the advertising world) will materially assist you, for they contain the latest sales-schemes of every kind of business. You will see that nearly every one tells the other about his plans and schemes. They also tell of the results the scheme brings. Lumbermen would condemn that policy immediately; but men in the advertising world know the plans and when a scheme fails, it is easy to see why it failed. They analyze the scheme and are careful not to make any mistakes in a like proposition. Thus the trade in general is benefited and it tends to ever increase the efficiency of advertising. There are less and less campaign failures. By reading the two papers mentioned above, you can get more ideas of the advertising game in six months than you could get in other ways in a life-study, except by taking a course in the subject.

The sales manager or his assistant should be the one to take up the advertising end of the business. Salesmen should have reprints of all advertisements, a number of each, for distribution to interested parties. They can be used at times instead of cards. Reprints should be attached to every sales-letter that goes out of the office. A notation, however, should always be in the corner, such as "Reprinted from HARDWOOD RECORD, Mar, 10th, 1913." That calls attention to the fact that you are a constant advertiser in that paper, and the buyer will look for your new advertisements. Give the paper instructions, when you send in your final O.K.'d proof, to send you an electrotype of the advertisement after it has been run. The re-prints can be had at little cost.

Advertising and salesmanship go hand in hand—one helps the other, but advertising helps at every turn. Therefore, the salesmen, the scouts of business, should make suggestions direct to the manager of advertising. For instance, if one salesman finds that the oak his firm has been shipping from its special oak mill takes a better and more even "fume" than any other oak the customer has ever bought, it makes a fine selling point. The manager of advertising can work it in to advantage. The question of fuming lumber is a vital one to the manufacturer of furniture and when that class of people can get oak that takes the ammonia easily, it is interested immediately. A saving in time is also evident—efficiency can be brought in. Yet, if a lumberman sat in his office and tried to think up these points he could never get any new ones. It's the boys on the job that see and hear these things and they are the ones to turn them in to the advertising man. Of course, the general selling points as to width, lengths, dryness, etc., can and must be found out at the mill end so that shipments will come along as represented. Points such as plump thickness, unusually old stock, special widths, fine figure, hard texture (in some woods like ash) and so on, are points that, for some lines of business, are telling ones for securing business, or at least, in creating inquiries that will eventually result in orders.

The power of suggestion cannot be over-estimated in this connection or, in fact, with advertising in general. If a man suggests a thing to us and puts it in such a way that it seems the only natural thing to do, we unconsciously do it. Suggestion has moved us to do it. Suggestion, however, must be made to do it naturally. For instance, a man is buying a certain grade for a specific purpose. Perhaps the car of the next lower grade on hand, on account of its high percentage of cutting, will meet the same requirements or will cut to nearly the same percentage, and yet it can be put in at the lower grade price. Here is a good sales or advertising argument. A like argument, on the other hand, would be a grade with a particularly high percentage of cutting (say ninety per cent); a proportionately high price can be had for it. The point is—deal in facts, not generalities.

Service is probably one of the best selling points, especially so today, where stock is badly broken at the mill end. Competition on the selling end is growing keener every day—it is much more so than on the buying end. One good thing that competition does, where price is the same all around, is that it calls for the best there is in salesmen to sell against each other, and it soon shows up the man who is on his job. The same thing applies in advertising. Take any two men handling the same product at the same price. Watch them dig up new selling points and hammer away at it in their advertising. Service will be one of the distinguishing factors. In lumber advertising, some good points that can be brought up are: Care in loading, facts about the character and texture of the stock, points about finishing, etc. Service should always be made the strongest point. One lumber manufacturer on the Ohio river used to put in one of his advertisements "We can ship on one day's notice." That is one of the best selling points that could be had and yet that manufacturer never made any point of it at all. He had the facilities for carrying it out, but he didn't "hammer it home" to the buyers enough. He could build up a large business and a reputation on that point alone, but like many other lumbermen he was not alive to opportunity.

Co-operation between the sales and advertising departments of a business means successful campaigns. Few in other lines of business are successful as far as the office of the concern is concerned. Most of the advertising men are at war with the sales managers—each claims that his part of the work has brought the business and therefore should be individually credited. There is too little co-operation here and that is why some of the campaigns are not as successful as they might be. When a salesman feels that someone else is "hogging" the credit in the office, he cannot put his best energies into his work, and as a consequence he does not feel like doing something that is not appreciated. In the smaller concerns this is eliminated, for the two jobs are combined in one—the sales manager also has charge of the advertising. This man has endless opportunities at his command but his work should be done under the most perfect conditions so that he can give the best that is in him. And, he should be let alone.

Yes, and while we are on that subject,—when a man is employed who has studied the game and knows his job—both the advertising and sales part of it—he is in better position to write and plan his work than any other member of the concern. Some things he writes may not look or seem right to you, but remember: the writing of advertisements is a peculiar proposition and you have put that man in charge because you believe he can make good. Let him alone, except to make suggestions. If you keep commanding him to do this or that, he is held down and can't get good results. If he's working for you and you're paying him a decent salary, he has your interests at heart, hasn't he? Well then, let him write his copy as he thinks best. Too many really good advertisements have been weakened, and in most cases spoiled as far as their "pulling qualities" were concerned, by the heads of concerns who knew absolutely nothing about this science, who just "wanted to have something to say to show their authority." This is a grave mistake.

Study of conditions in the several lines of business to which one caters reveals many points which can be made useful in both the advertising and sales departments. A furniture manufacturer can tell you something to advantage about your stock for his business that you would never know of otherwise. That is why the salesmen should be taken into confidence with both the sales and advertising

managers. A mighty good plan and one that is used by a great many concerns in other lines, is to have all the salesmen (or as many as expense will permit) convene at the main office with both of the managers. Put them all on an equal footing and exchange sales ideas, criticize methods that are now in use, suggest newer ideas, shorter cuts in the way of doing things, tell of experiences, repeat what customers say about the goods and so on. Besides bringing out new points, this sort of gathering increases the interest of the salesmen in their concern for they see that they have something to say and are not merely "hirelings." You will get the best there is in them and you will be surprised at the results at the sales end. You know too, that the "boys" are out on the road and they see and hear things that you, in the office, never would. They should be alert for suggestions, criticisms, etc., as they are the ones that have to sell the stock. What you in the office want to do is to help them all you can.

Follow-up letters play their part in any campaign. They are just as essential as the advertisement. In fact, in some lines of business they play the most important part. In this case, the advertisement is simply placed there in order to secure the prospective customer's name and address and then the follow-up starts to get in its work. This consists of carefully thought out letters, booklets, catalogs, etc. In the case of lumber, sales letters, stock lists, printed descriptions, etc., are absolutely necessary. They have to be thought out as carefully as the advertisement; they must be sent in logical order, and the arguments must be in logical order.

After advertising brings you the inquiries, it is then up to you to give special attention to the proper handling of sales letters, inquiries, salesmen and in fact, priming up your whole selling organization.

Advertising plays the part outlined in the first article. It gives you the start. It sets the pace. You must do the rest.



Production of Veneers in 1911



Statistics of the veneer industry in the United States for 1911 are given in a bulletin soon to be issued by the Bureau of the census. The total quantity of wood used in the manufacture of veneers in the United States in 1911 amounted to 444,886,000 feet, log scale. This represents a decrease of 6.8 per cent from 1910, but an increase of two per cent over 1909. The number of mills reporting in 1911 was 18 per cent less than in 1909, but the average output per factory in 1911 was greater than in any other year.

Veneer is very thin lumber. The raw material is usually purchased in logs of random lengths. Some are cut into flitches and in turn sawed into thin sections called sawed veneer. In other cases the logs, after being steamed, are shaved by sharp knives. This method produces sliced veneer. Neither of these processes is as extensively used as the third, the rotary cut, although for certain purposes they are of importance. The structure of the wood, the size of the logs, and the use for which the veneer is designed largely determine the process employed. Where the product is for fine exterior finish and has to be selected and matched according to the figure or grain, sawing is the favorite method. Together these two processes were employed to make approximately two-thirds of the white-oak product and about one-half of that from mahogany and other foreign woods, but only about one-eighth of the output from domestic woods. The remainder was manufactured by the rotary cut process. This method is similar in principle to the slicing process. The log after being steamed is revolved against a fixed knife the length of the log, and wide sheets are shaved off. Though the domestic and cheap veneers are generally made by this method, the fact must not be lost sight of that, except in the case of oak veneer, the rotary-cut process was used equally with the other two methods for cutting ornamental veneer from both foreign and domestic woods.

Veneers are cut into a number of thicknesses. The domestic woods, rotary cut, range from 5/16 to 1/50 of an inch, and the imported woods from 3/16 to 1/34. The 3/16 is the most popular size, followed by 1/8, 1/4, 1/16, 5/16, and 1/20. In the sawed and sliced products the thickest veneer is 5/16 and the thinnest usually 1/110 of an inch. The thicknesses most used were 1/20, 1/16, 5/16, 1/4 and 1/30, in the order named. With such a wide range of thicknesses it would be impracticable to gather the figures in surface measure and undertake to reduce them to board measure, while if production were shown by superficial contents, as in commerce, the figures would not be comparable with the reports on other forest products.

The future promises an extensive growth of this industry. Sheets of veneer and the gluepot are likely to play an even more considerable part in forest utilization. Built-up lumber, consisting of several layers of veneer glued together, is becoming a more important factor each year in the manufacture of a number of staple commodities. Furniture tops, panels, and backs; drawer fronts and bottoms; chairs, including auditorium seats; trunks; store and office fixtures; packing boxes; vehicle bodies; finish of passenger cars, etc., are examples. This product has the requisite strength, is lighter than lumber, is less likely to warp or check, and probably is less expensive, inasmuch as the cheaper woods are utilized for the larger portion of its manufacture. Some of the favorite woods used are species that have not proven as serviceable for lumber as for veneer. The growing tendency to market commodities, including fruits and vegetables, in light-weight packages, such as berry cups, fruit baskets, tills, and veneer boxes and barrels, has opened a wide field for shaved lumber. This use is now thoroughly established, and its rapid increase seem a certainty.

Red gum was the principal veneer wood cut and it constitutes more than 30 per cent of the total of the domestic woods. In 1910 it reached its highest mark, a little over 34 per cent, which was more than the combined amounts of any other four woods reported. The use of this wood probably has been the prime factor in bringing the veneer industry to the degree of importance it has attained. The largest increase in quantity used of any wood in 1911 was shown by white oak, which for the first time exceeded the consumption of yellow pine, cottonwood and maple.

Ten of the woods used for veneer showed an increase and only nine a decrease, notwithstanding the fact that the total was less than the year before. The largest reductions were for yellow pine and maple, amounting to over one-half of the total decrease. Of all woods, cottonwood, ranging from 30,000,000 to 34,000,000 feet during the five years, has remained most constant.

The greatest percentage of increase in use was shown for two kinds of veneer wood but little used prior to 1911, namely, hemlock and Douglas fir. With the exception of Spanish cedar, which is employed principally for cigar boxes, the foreign woods are mostly used for the best grade of cabinet work, and bring high prices.

Relatively considered, the foreign species showed a much greater falling off from the preceding year than did the domestic woods. The decline of the former amounted to nearly 30 per cent, as against a little over 6 per cent in the case of the latter. The decrease in the quantity of mahogany was over 45 per cent—the largest reduction shown by any of the veneer woods. All of the foreign woods generally fell off in slight amounts, excepting Circassian walnut, which showed a marked increase.

The veneer industry is fairly widely distributed, being reported from thirty-three states. The greatest production is in the central hardwood region. In the order of their importance, the seven principal veneer-producing states are Arkansas, Michigan, Wisconsin, Illinois, Kentucky, Indiana, and Missouri. Each of these states reported over 25,000,000 feet, and each of the first three reported more than 30,000,000 feet. The greatest losses occurred among the southern states—Alabama, 43 per cent; Florida, 20 per cent; and Texas, 46.7 per cent—while the largest gains occurred in Mississippi,

Arkansas, and Ohio. New York state maintains its lead in the eastern states, though the loss there in 1911 was nearly 6,500,000 feet. Maryland, among the eastern states, showed the largest gain as compared with the preceding year. As a group, the Pacific coast states have been steadily increasing their consumption of veneer wood, the quantity used in 1909 being 10,426,000 feet, as compared with 11,578,000 in 1910, and 17,494,000 in 1911, which figures represent hardwood veneers from the East and veneers of western softwoods.



Useless and Useful Exhibitions



Lumbermen and users of wood have had their attention called to the Panama Exposition at San Francisco which opens its doors eighteen months hence. This show will probably surpass in size, and should exceed in usefulness, any other world's fair ever held. Lumbermen can make it the greatest advertisement of their industry on earth, or they can neglect it and derive little benefit therefrom.

The exposition will be, primarily, an advertising medium, a trade promoter, a business getter, a means of spreading practical and useful information and of placing it before the public. The individual, company, or association that neglects this opportunity to get before the people in the best possible way, may wait a long time for another chance like it. The acme of the world's competition for business will be seen at San Francisco in 1915.

Lumbermen may think they can remain passive without being hurt. Possibly they can, but it is doubtful. One reason for the doubt is that an array of wood substitutes, such as were never seen before, will be there. Some of the brainiest inventor's of this or of any other country will exhibit numerous makeshifts designed to take the place of wood, and the genuine article will lose out if its friends neglect it. The best showing possible should be made for wood, but the best showing does not mean the most voluminous aggregation, or the largest collection, but an exhibit selected with judgment and displayed with common sense.

In order to accomplish this, there are some things that should not be done as well as some that should be. Those which ought not to be done may be named first. Former general plans of wood displays at world's fairs should not be followed, but should be relegated to the dead past and left there. A radical change in method is necessary. The old plan might have answered some purposes in its day, but it has had its day.

Beginning with the Centennial and ending with Jamestown, the overmastering idea in getting together every forest exhibit was to saw off a few hundred logs—the more the merrier and the larger the better—champer one face to show the grain, set the logs on end in long, monotonous colonnades, tack on cards containing the trees' names in Latin (which not one visitor in a thousand read or understood), and that was the wood exhibit. Sometimes a few freak growths were thrown in for good measure.

Tree exhibits of that class have become almighty "stale, flat, and unprofitable" in this country; but the worst of it is, the same things will turn up again at San Francisco unless lumbermen provide something better. Not only will something similar be on deck again, but in many instances the identical things will be there. Wood exhibits which have seen service in various great and small fairs have not been destroyed, as a rule. They have been divided and parceled out among states and communities and are only waiting to be assembled for the next world's fair. No one knows where all the parts are, but they will be forthcoming. One bunch is known to be in Chicago; another reposes in an attic of a Texas University building; a third occupies part of an upper floor of Georgia's state capitol; a ramshackle school house in the outskirts of Tampa, Fla., holds a fourth; and thus others are dispersed far and near.

Presently the call for exhibits will come from San Francisco, and the old logs and blocks will be brought out for another parade. Dust will be swept off, and the heterogenous crops of longhorn, shorthorn, and horntail beetles will be shaken out, and the logs will once more be set on end for millions of people to look at.

That must not happen. Can't we have something new? Must we go on following the same old plan forever? The great wood-using industries need a new deal. They want something that will represent the spirit of progress, not a collection of uninteresting stuff as dead as Egyptian coffins.

The wood exhibits at San Francisco should be finished products rather than raw material. Actual uses should be shown—things ready to sell and ready to use. The jeweler does not exhibit a wheelbarrow load of ore; the china merchant a pile of clay; the seller of silk, a worm and a mulberry leaf; but the jeweler shows his watches, rings, pins, and bracelets; the crockery merchant exhibits dishes, bowls, and vases; the dealer in silk displays his cloths, braids, and trimmings. They appeal directly to buyers.

Should not dealers in wood commodities do the same? Cannot an appeal to the users of wood be made by means similar to those which the jeweler finds effective?

It has been proved that it can be done, and one instance will illustrate. Take the blockwood furniture of China. It is faultlessly made, finely carved, and wherever it appears in an exhibit, it attracts attention. Those who become interested, examine it carefully, its beauty grows on them, and if their pocket books warrant an indulgence of their tastes, they are liable to buy. The Chinaman shows what he has to sell; he shows it to the best possible advantage, and he gets prompt returns for his advertising. How much carved furniture would he sell if he simply stood a sawed-off log on end and tagged it *Amerimnon latifolium*?

Those who exhibit the products of wood (or any other products) should do it as a business proposition, as a means to an end, and that end should be to increase sales and make more money. An exposition is not a museum. Some of the visitors attend for the amusement they find, but the business man does not put an exhibit there for the purpose of amusing anybody. He wants more substantial returns than that.

The manufacturers of wood commodities have an opportunity to appeal to the public in a manner that will bring results. They must show what they have to sell—the articles themselves, not merely the raw material. The richness of American woods in color, grain, figure, luster, strength, hardness, and in many other properties and qualities, should be displayed in the finished articles. Every manufacturer who makes an exhibit ought to put forward the very finest articles that he produces—a piece of furniture, panels, boats, vehicles, shuttles, shingles, cooperage, paving blocks, handles, flooring, boxes, caskets, canes, musical instruments. No matter what particular commodity it may be, it should represent the best in its class. The idea should not be to fill a certain allotted space in the easiest manner possible, but to fill it with the best exhibit possible for the purpose of bringing to the exhibitors the largest profit possible.

The man who can produce something excellent can increase or even create a demand for it. Millions of people hurry through an exposition and see little; but some study with care such things as interest them, and it is the eye of these people that the exhibitor wants to catch. When he has attracted their attention he is in a fair way to get their business.

Wood substitutes are in the field and fighting for the market. Lumbermen and woodworkers must face the fight squarely. Lectures and literature are all right in their place; but the best argument in favor of wood is the wood itself—not raw, but ready for use, every good point brought out where it can be seen, examined, and appreciated. The National Lumber Manufacturers' Association has appointed a special committee to look into the matter of a permanent exposition, but the trade should co-operate to the greatest possible extent along the lines suggested. This opportunity should not be overlooked.

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 482—Wants Information About Hickory Borers

Moreauville, La., June 12, 1913.—Editor HARDWOOD RECORD: Will you please advise us how the pin-worm originates? This worm has caused great damage to our lumber, and for this reason we would like to know if they come into existence by the fly. If you know of any method used to prevent them, we would appreciate your giving us the formula. Thanking you in advance for this information, we are

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The writers of the above letter have been advised that the pin-worm of which they speak as injuring their lumber is probably what is called the powder post beetle. If such is the case, it is particularly destructive to seasoned hickory, though it works in other dry woods. There are several kinds of these insects, but they work in much the same way. Their presence is usually first detected by white dust falling from the wood. Some of the insects are very small. While working in the wood they look like worms, but they are the larval stage of beetles and they finally grow wings and legs and take flight. They develop from eggs deposited in very small holes in the surface of the wood, and soon after hatching the larvæ begin to bore. In the case of hickory stock, a liberal sprinkling with oil has done much to keep the egg-laying beetles away. When the larvæ hatch inside the wood and begin boring very little can be done as far as infested pieces are concerned, but such pieces should be removed and, if useless, should be destroyed with their broods of larvæ.—EDITOR.

B 483—Seeks Cottonwood Dimension

HARDWOOD RECORD is in receipt of a list of sizes of 4/4 cottonwood dimension from an important St. Louis re-manufacturing house. The requisition calls for three cars per month, and the lengths range up to 72" long, and widths from 8" up. The stock must be thoroughly kiln-dried, and worked up to proper widths on Linderman dovetail glue jointer, and it is to be surfaced two sides to 13/16".

Anyone interested in the list of sizes can have them on application, by referring to B 483.—EDITOR.

B 484—Seeks Birch, Chestnut, Basswood and Oak

HARDWOOD RECORD is in receipt of a purchaser's requisition from an important Pennsylvania remanufacturer calling for a considerable quantity of red birch, chestnut, basswood, plain red oak and poplar of firsts and seconds and No. 1 common grades, ranging from 4/4 to 16/4 in thickness. Anyone interested in the inquiry can have the list on application, by referring to B 484.—EDITOR.

B 485—Log Scale for Small Logs

Morehouse, Mo., June 5.—Editor HARDWOOD RECORD: Recently there has come up with us a little question in regard to the measurement of very small timber with the Doyle-Scribner rule. Of course, it means Doyle for the smaller sizes. What we wish you to advise us, if you can, is the basis of Doyle rule for logs smaller than 9 inches.

The writer of the above letter has been advised that the Doyle rule does not contemplate scaling logs less than 9" in diameter, and that small logs in bolt form supplied to handle and spoke factories are usually sold on the basis of cord measure.

If anyone is familiar with a scale which will accurately measure 6" to 9" timber, HARDWOOD RECORD will be very glad to receive it.—EDITOR.

B 486—Wants Prices for Dimension

Easton, Pa., June 12.—Editor HARDWOOD RECORD: Can you tell us the market price paid for standard dimension ash and oak; prices of walnut gunstocks and for wagon tongues? If you cannot furnish this information, we will be pleased to receive information as to where we can procure it.

The above inquirer has been advised that it is impossible to make quotations on dimension stock owing to the great variation in prices being obtained for it. He has been given the names of sundry manufacturers who probably will supply the information asked for.—EDITOR.

B 487—Seeks Beech Lumber

Cincinnati, O., June 12.—Editor HARDWOOD RECORD: We are desirous of securing a quantity of 4/4 and 8/4 beech. Will you be kind enough to give us the addresses of any mills where this lumber can be secured?

——— LUMBER COMPANY.

To the writer of the above inquiry a list of mills manufacturing beech in the North has been supplied. Any others interested in the inquiry can have the address on application.—EDITOR.

B 488—Seeks Sources of Supply for Handles and Hickory and Persimmon Dimension

Birmingham, England, June 4.—Editor HARDWOOD RECORD: We are buyers of all kinds of ash, hickory and basswood handles, sawn hickory, persimmon, etc. Will you kindly put us in touch with concerns producing these lines of goods?

The above inquirer has been supplied with a list of manufacturers of all varieties of handles, and a short list of hickory dimension and persimmon producers. Any others interested can have the address on application.—EDITOR.

B 489—Seeks Dimension Stock

Eastwood, N. Y., June 13.—Editor HARDWOOD RECORD: We have spent some time in trying to learn the different sources of supply for dimension stock, and up to the present time we have been unsuccessful. We have been informed that if we would address you on the subject, you could no doubt be of considerable assistance in giving us the names of manufacturers of this material.

——— MANUFACTURING COMPANY.

The above inquiry is from a leading wholesale manufacturing consumer and has been supplied with a brief list of dimension material manufacturers. Any others interested can have the address on application.—EDITOR.

B 490—Seeks Machine for Grinding Sawdust

Philadelphia, Pa., June 14.—Editor HARDWOOD RECORD: Beg leave to ask if you can give us the addresses of manufacturers of machines for regrinding sawdust such as is used in the manufacture of floor sweeping compounds.

HARDWOOD RECORD is unable to supply the information asked for in the foregoing letter. Anyone knowing the name and address of a manufacturer of the machine referred to will kindly communicate it.—EDITOR.

B 491—Seeks Thin Panel and Table Top Stock

Binghamton, N. Y., June 4.—Editor HARDWOOD RECORD: We are in the market for some thin panels and table top stock. Will you kindly send us the addresses of some manufacturers in this line of business?

———COMPANY.

The above inquiry is from a high-class furniture manufacturing house. Anyone interested in the inquiry can have the address on application.—EDITOR.

B 492—Further Information About Imported Black Oak

In the issue of May 25 HARDWOOD RECORD the following letter appeared in the Mail Bag section:

London, E. C., May 9.—Editor HARDWOOD RECORD: The object of our letter is to inquire whether you would be good enough to furnish us with the addresses of firms who are in a position to act as agents for the sale of black oak. The class of oak we are offering on account of shippers is in Europe very highly valued, and we should therefore be glad to have an idea of the possible price to be obtained on your markets.

Our friends propose consigning a quantity of logs to your market, in view of which we should be obliged if you could tell us the best port for this consignment and charges that may be incurred in handling a shipment as suggested.

We are forwarding to you, this mail, a small sample of the oak for the purpose of showing the color, and furnishing you with an idea as to the class of oak our friends have for disposal.

We trust our queries have not encroached too much upon your courtesy, and permit us to express our thanks in advance.

The opinion was expressed by HARDWOOD RECORD that the wood had been artificially filled with some dark substance. Further information from the exporter, however, clears up the matter. The wood is oak, apparently Austrian oak (*Quercus robur*) and comes from Russia, where it is procured from the bottom of a river. Entire trees were submerged, probably many centuries ago, and have lain out of reach of air and of course immune to decay. The dark color is due to natural causes. Doubtless the river water and the iron in solution acted

on the tannin in the oak to produce the result. The texture of the wood has not been changed, and no signs of petrifaction are visible. The pores, however, are plugged with a dark substance that looks like rubber. This may be the tyloses (growths) which plugged the pores of the wood while the tree was alive, the same as may be seen in nearly any white oak.

It is said that a theater in Moscow, Russia, has been finished with this oak. Gold leaf was rubbed into the pores of the quartered wood with effect that is said to be very beautiful. The mirrors brought out by quarter-sawing are clear and distinct, and are much darker than the rest of the wood, in fact, nearly as black as ebony. This oak is a unique example of what an exquisite wood-finisher nature is when it has a long period of years and a perfect laboratory in which to bring the work to perfection.

B 493—A Lumberman in Rome

HARDWOOD RECORD is in receipt of the following communication from a well known member of the hardwood trade, namely, F. J. Kuny of the Williamson-Kuny Mill & Lumber Company, Mound City, Ill., who has been spending the last month or two on an extended visit to Euope:

Rome, Italy, May 29.—Editor HARDWOOD RECORD: If you have not seen Rome, forget lumber for six months and feast your interest in the history of a colossal past here in Rome. I guarantee you will not tire.

F. J. KUNY.

B 494—Profit in Special Furniture Manufacture

Colesborne, England, June 3, 1913.—Editor HARDWOOD RECORD: Your article on fancy hardwood floors in HARDWOOD RECORD of May 25 interests me because I have tried in vain to find a manufacturer of parquetry in England who has realized the quantity of material in beautiful hardwoods of many native and foreign kinds, which goes to waste in the forest and at the lumber yard. This material is admirably adapted to small cabinet work and parquetry, or what may be called wood mosaic. In the course of my work on the trees of Great Britain, I have come across burls, crotches, curls and waves of other pieces of wood with beautiful figure, which would have been wasted or given away or sold at low prices because there is no regular market for such stuff when they are not large enough to cut into boards or veneer of standard measure and known quality. Some of the most beautiful pieces of furniture in my home are made from such neglected wood and have not cost me as many shillings as they would be worth pounds if they were old. The price paid by art collectors of Europe and America for old furniture, only because it is old, seems ridiculous when compared with what it costs to make as handsome pieces as I have in view. If someone were to make a specialty of this work, I am sure he would reap a rich harvest. Japan is the only country I know of where good taste and great skill in woodworking by hand and house decoration is well understood.

As the fine figure in wood seems to be more appreciated in the United States than in England, I should be glad to hear from any amateur or firm who appreciates the idea.

B 495—Wants Maps Showing Timber Sections of United States

South Bend, Ind., June 20.—Editor HARDWOOD RECORD: We are under the impression that we received a few months ago from your office a map or chart showing the location of the different timber sections of the United States. It was our intention to have this chart framed for reference, but in some way it has been misplaced.

If you are in position to furnish us with another one of these charts, we shall be very glad to receive it at your early convenience.

——— COMPANY.

The above company has been advised that we did not supply it with a map showing the location of the different timber sections of the United States, but sent it a copy of HARDWOOD RECORD containing a graphic map and text showing lumber cut of the various kinds of wood for the calendar year 1910, issued by the Forest Service, United States Department of Agriculture; further, that we think perhaps a duplicate of this colored map can be obtained on application to the Forest Service.

In connection with the census of 1890 a set of very beautiful graphic maps was issued, showing the distribution of various woods which covered everything except red gum, which was then not regarded as a commercial wood. These maps are now out of print and are unobtainable save through collectors of old books. It is just possible that the set could be obtained through some first class second-hand book establishment, but these maps are rated at a value of $150, as we understand it.

The inquirer has been further advised that the best thing he can get showing standing timber is a document issued by the Bureau of Corporations of the Department of Commerce and Labor, Luther Conneaut, Jr., Commissioner, entitled "The Lumber Industry, Part I, Standing Timber," dated January, 1913. It is understood that this document can be obtained by application to the Bureau of Publications at Washington, D. C. It contains several maps and a good deal of information on the subject from the viewpoint of the government.—EDITOR.

B 496—Application of Guarantee Percentage of Special Widths

———, Ark., June 19.—Editor HARDWOOD RECORD: We have sold a customer a carload of 10" and up wide lumber, guaranteed 30 to 35 per cent of 12" and wider. In what manner should the amount of 12" and wider be determined? In other words, should the number of pieces in the car be considered or the board measurement of the car?

To the above inquiry we have replied as follows:

While we know of no definite precedent in this matter, there is no reason for believing that "guaranteed 30 to 35 per cent of 12" and wider" can mean anything but that that percentage should be of the total board feet rather than of pieces. The only way that the guarantee could specifically provide for 30 to 35 per cent of 12" and up boards in the total number of boards, would be to specifically mention that it should apply to the number rather than the total board feet, because if all boards 12" and up wide were removed from a carload of say, 15,000 feet, and piled by themselves, it is very apparent that the total board feet in that pile, if in number the boards represented 30 to 35 per cent, would be considerably more than that percentage.

Of course, if the specification were that the board should be exactly 12" and not wider, the specification would hold good in either case, but since "and wider" is added, it stands to reason that the percentage must be based on board feet rather than based on numerical percentage. Further, if you were to consider the 30 to 35 per cent of 12" and up as applied to the number of that class of boards, in a car of 10" and up, it would be a simple matter for the millman to have as many boards as possible out of the remaining 65 to 70 per cent as near to 10" as possible. This would be making the shipment within the specifications, but would give a larger total number of boards, and hence the numerical percentage of 12" and up would be greater. Vice versa: If the millman should put in a larger number of boards more nearly 12" than 10", the numerical percentage of 12" and wider would be correspondingly decreased; that is, any shipment varies in number of boards in a total order according to the width of each board. Therefore, the smaller the average width, the larger the total number of boards and the larger actual number of 12" and up, and the smaller the total number, the smaller the actual number.

We see no reason why there could be any other construction placed on this division other than that it shall represent 30 to 35 per cent of the total board feet in the shipment.—EDITOR.

Clubs and Associations

National Commissary Managers to Meet

Tracy B. Luccock, the live secretary of the National Commissary Managers' Association, has just issued a bulletin devoted to an exposition of the many good things to be presented at the meeting of that association at St. Louis on August 19, 20 and 21. According to the program presented, there will be mighty valuable business sessions and in addition ample entertainment features will be offered. The convention headquarters will be at the Planters hotel.

"Windy City" Picnic on July 15

The Lumbermen's Association of Chicago and the Lumbermen's Club of Chicago, will give a joint picnic at Northwestern Park, Des Plaines, Ill., on Tuesday, July 15. William A. Eager, whose genius is always called upon when there is anything in the line of entertainment to be planned, is "boss" of the arrangements, and says that a program of unusual interest is about prepared. It will include the regular ball game between the hardwood element and the pine section of the Chicago trade, as well as various field events for men and those who spend what little money the men might happen to make in the lumber business. By reading between the lines one can see that this means wives, sweethearts, daughters and other near relatives.

In addition, the location of Northwestern Park, situated as it is on the

beautiful Des Plaines river, will offer other features not available at previous picnics. Boating, and, we understand, even fishing and bathing, may be indulged in, so those attending will not be limited to field events and the ball game for their amusement.

The park is a grove of thirty-five acres of attractive woodland, and in itself is a pleasing place to visit. An attractive dancing pavilion will give those with sufficient backbone an opportunity of trying out the tango, Boston and other latest fancy feats.

Mr. Eager has arranged with the Northwestern for special train service. The train will leave Chicago in the morning at about ten o'clock —the exact time not yet having been set. The journey will consume only about thirty minutes, so it can be seen that it is no slow, "lumbering" train.

More complete details as to the program will be given in a subsequent issue.

Outing of the Cincinnati Lumbermen's Club

The annual June outing of the Cincinnati Lumbermen's Club was held Saturday, June 14 at Ryland, Ky. For many years it has been the custom of this organization to set aside some afternoon or evening in June for an outing which, until this year, included wives, sisters and sweethearts. At the last meeting of the club in May it was suggested that this year the picnic to be held in June be a stag affair, and consequently the entertainment committee was instructed to make arrangements accordingly. A special train was secured and at 1:30 p. m. the party left for the private grounds of the Kentucky Shooting and Fishing Club where upon arrival of the party and the several automobile parties that had preceded, a light noon day luncheon was served. The afternoon was devoted to baseball and other field games, bathing and boating. There were just sixty-nine members of the club present.

At 6:00 p. m. the party repaired to the private club house, where a fine chicken dinner was served. After dinner the party indulged in various card games until train time. The outing was declared one of the most enjoyable ever held.

Philadelphians Successful Golfers

Those who in their purblind judgment have dubbed the city of Philadelphia slow, what have they to say of its prodigious athletic activity and prowess displayed at the eighth annual tournament of the Lumber Trade Golf Association, which was held in Garden City, L. I., on June 10 and 11? Its baseball teams are the champion players. The winning of the great polo match has added its laurels, and the Philadelphia lumbermen golfers have set the sporting pace for their rapid sister cities in the East at this much contested tournament. Out of about thirty prizes the Philadelphians won twelve, including the Sawdust Club trophy, which was carried off by the Quaker City team, with a score of 369, Boston standing 381 and New York 389. Three Philadelphians were elected officers for 1913. Frank Buck, vice-president; W. H. Smedley, treasurer; Horace A. Reeves, Jr., secretary.

Outing of Buffalo Lumber Exchange

The Lumber Exchange went on its first outing of the season on June 17, best known in American history as Bunker Hill day, but no sort of warfare was carried on except that several baseballs were severely punished on the diamond attached to the Buffalo Automobile Club, where the lumbermen met in this capacity for the second time since the clubhouse was opened. The conflict between the "white-pines" and the "hardwoods" in the national game was some time ago laid aside, and the nines are now made up without reference to branches of the business.

The first, or hard-ball, game was headed by I. N. Stewart and O. E. Yeager, and Mr. Stewart rested on former laurels in order to become a pitcher in the second game. The first game was played chiefly by the younger lumbermen and resulted in the score of 12 to 9 in favor of the Stewart team. The real sport was nearly all developed in the second game, which was headed by F. M. Sullivan and H. A. Stewart. Nearly all of the older members took part, though it was observed that Anthony Miller was not given a place in the game, probably on account of his not being on the anxious list when the choosing was done. The score of the game was practically a tie, and was so declared officially, although the sport was of such a free and easy sort that nobody knew when the game was finished. The supper and the speeches were all that were required for the occasion, the latter being of a semi-political character.

Evansville Lumbermen in Outing

The annual outing of the Evansville Lumbermen's Club which was held on the Ohio river Monday evening, June 16, was one of the most delightful affairs the lumbermen have ever projected. The steamer John S. Hopkins was chartered for the occasion, leaving Evansville at 2:30 in the afternoon and making a trip up Green river to within a short distance of Spottsville. On returning, it went up the Ohio river as far as Newburg. In all there were about one hundred lumbermen in attendance with their families and friends, and there was an unanimous expression of entire satisfaction with the arrangements made by the entertainment committee. There was the usual music, singing, dancing, etc.

The unique feature of the dinner was the menu cards which were designed by George Worland, secretary of the club. The covers were made from cedar grown on the island of Cuba, and cut to a thickness of 1/1000 of an inch. On the inside of the covers were found samples of the various woods handled by the various hardwood mills in Evansville, such as Indiana white oak, figured oak, red gum, African mahogany, Circassian walnut and Tennessee cedar.

Sub-Committees of Conservation Congress Have Useful Work

The forestry committee of the National Conservation Congress has appointed sub-committees through its chairman, Henry S. Graves. These sub-committees will report to the congress at its meeting in Washington next November. The first sub-committee is the committee on publicity. This will give publicity to the forestry work of the National Conservation Congress, tending to instruct the people to a realization of the methods and purposes of forestry and conservation in general.

The second committee is the federal forest policy committee, which will treat of the needs of the federal government in the matters of forestry legislation; national versus state control of the national forests; economics of timber supply in relation to production and consumption, and details of national forest administration.

The state forest policy committee has been established for the purpose of framing, passing and enforcing state forest laws; acquiring and managing state forest reserves, with special reference to cut-over lands; co-operation between states, between the states and the federal government, and between states and private agencies.

The forest taxation committee is one of the most important of all, and will have to do with the consideration of existing tax laws, and their influence on forest management. It will get at basic principles of wise forest taxation, with definite suggestions for legislation.

The forest fires committee will investigate fire prevention by states, federal government and private interests. It will study forest fire association work with special reference to the possibility of co-operation. It will also take up the matter of forest fire insurance.

The lumbering committee has to do with investigation as to the lumber business, its economic importance, and the principles governing methods, markets and prices. It will sponsor the application of scientific management to lumbering operations, and the submittal of reports on log and lumber measures, with recommendations for standard scales.

The members of the forest planting committee have to do with conditions under which commercial planting is desirable, also nursery methods, field planting methods and natural versus artificial regeneration.

The main duty of the forest utilization committee is a study of closer utilization in logging, in manufacturing and in marketing and conservative treatment of timber.

The forest school education committee will investigate the strength and weakness of forest school education, and will make recommendations as to courses or methods of teaching needed to better fit men for practical work in lumbering. It will investigate the need for ranger schools and short courses for woodsmen and farmers.

The forest investigation committee will select subjects demanding investigation, and will place responsibility for investigation.

Seventh Annual Lumbermen's Golf Association of Chicago

The Lumbermen's Golf Association of Chicago held its seventh annual tournament at the Beverly Country Club links on June 24. Clear weather brought out a large number of players and a good gallery. The prizes combined beauty and utility. The following is a record of the events with the donators, winners and description of prizes:

The American Lumberman cup and gold medal to winner and silver medal to runner-up for the lowest score of the day: W. J. Foye, Omaha, Neb., winner; F. M. Baker, Chicago, runner-up.

The Herman H. Hettler cup to become the property of the player winning it three times, it being the trophy of handicap match against bogey: Percy F. Stone, Rockford, Ill., winner.

The Lumbermen's Club cup, a handsome open silver pitcher, for player making best score on all odd holes, C. T. Bailey and James Miksak, both of Chicago, tied.

The W. L. Sharp cup, for player making best choice score on eighteen holes, B. F. Mashek, Chicago, winner.

The Hopkins prize, a beautiful sterling silver and glass flower-holder, for best score of afternoon play open event with handicap, J. F. Mingea, Chicago, winner.

The C. H. Worcester trophy, a beautifully engraved silver tray, Frank B. Stone, Chicago, winner.

The first flight prize, a silver sugar bowl and creamer donated by E. A. Thornton, Robert W. Fullerton, St. Louis, Mo., winner.

The second flight prize, a silver ice-water pitcher donated by E. S. Gamble, William L. Sharp, Chicago, winner.

The third flight prize, a silver serving plate donated by the golf association, F. J. Burns, Chicago, winner.

The fourth flight prize, a silver encased casserole also presented by the golf association, J. E. Burns, Chicago, winner.

Special prize, a handsome punch bowl, L. E. Rollo, Chicago, winner.

The following officers were elected for the coming year: E. A. Thornton, Chicago, president; E. A. Lang, Chicago, secretary; S. O. Knudsen, Chicago, treasurer; directors, W. L. Sharp, C. M. Smalley, E. C. Mueller, R. W. Fullerton, L. J. Hopkins, L. E. Rollo.

Lumbermen Lose Shingle Fight in Birmingham

The city council of Birmingham, Ala., has passed its anti-shingle ordinance in the face of strenuous and concerted effort covering the past year on the past of the lumber trade. In addition to forbidding the use of wooden shingles within the city limits, the ordinance specifies that where more than 20 per cent of a shingle roof is burned in any fire, the entire roof shall be replaced with so-called "fireproof" roofing. It is understood that the fight will be continued by the lumbermen with a view to preventing the ordinance going into effect Oct. 1, as is provided.

With the Trade

Doing Big Business in Circassian

The R. S. Bacon Veneer Company, North Ann street, Chicago, reports that it has nearly 2,000,000 feet of Circassian walnut veneer on hand, having been specializing on this highly popular wood for some little time. Mr. Bacon is an expert in picking logs, devoting considerable time each year to trips abroad for the purpose of selecting desirable wood. The company receives monthly shipments of logs direct from the Caucasus.

The Bacon-Underwood Veneer Company, of Stockton, Ala., an affiliated organization, is constantly increasing its timber holdings whenever a good opportunity offers. The company's veneer mill is now protected by its own holdings of timber for thirty years' cut. So far during 1913 the principals of the Bacon-Underwood Veneer Company have acquired 1,200 acres of tupelo timber, and are now working on a proposition to take over considerable more.

Thebes Hardwood Lumber Company Organized in Chicago

The Thebes Hardwood Lumber Company is the style of a new organization recently organized at Chicago, with a capital stock of $10,000. The company will engage in wholesaling and retailing hardwood lumber in the city. The incorporators are: Jacob F. Haske, Joseph Kuberski and John Szopinski.

Wolf Mountain Lumber Company Buys Timber

The Wolf Mountain Lumber Company, a North Carolina corporation with headquarters at Asheville, N. C., and headed by S. F. Chapman, of Asheville, and backed by Henry L. Dougherty & Co., of New York, has purchased from George H. Smathers timberlands along the headwaters of the Tuckaseigee river, lying mostly in Jackson county. The consideration was $144,000. A survey of the property showed that it had more than twenty miles of waterway providing a continuous water power amounting to 13,000 horse power.

The scheme is essentially a water power scheme, the timber being purchased merely for investment with the idea of insuring the conservation of rainfall for the purpose of providing uninterrupted water power. The water power will be utilized in hydro-electric development. The timber will be handled with the idea of conserving the water power. It is probable that a hunting and fishing club will be organized in the near future to take over the fishing rights of the preserve.

Important Arkansas Hardwood Deals

The Fee-Crayton Hardwood Lumber Company, of Dermott, Ark., recently purchased 4,000 acres of high-grade hardwood timber, lying in Arkansas, from the Morganie Land Company, of New Orleans, La. This tract is in Chicot county, near the Louisiana line. The entire stand is virgin growth, never having been touched by axe or saw. It is considered as fine a bunch of hardwood timber as can be found in the southern part of the state.

The operations will be connected with the Iron Mountain Railroad by means of a line running four miles into the timber. The land was originally purchased in 1886 by the Citizens Bank of New Orleans at a ridiculously low price, it being inundated most of the time. Drainage facilities, however, have resulted in its ready accessibility, and it is said that the price paid by the Fee-Crayton Hardwood Lumber Company is close to the record mark.

This concern will immediately begin the erection of mills on this property. It is stated that after the removal of the timber the land will be worth considerably more than the purchase price, as it is of high character for corn and cotton.

Another important deal recently consummated is the sale of a tract known as the Van Ravansway tract in the neighborhood of Brinkley, Ark. This timber was purchased several years ago by Dr. Van Ravansway at a nominal figure. It includes 10,000 acres and during the past two years a small portion of it has been used each year for colonization. The timber has been bought by Pittsburgh capitalists for $135,000, and will be exploited immediately, being cut clear for cultivation.

Famous Dietz Logs Sold

A crew of men has been placed on the Dietz farm at Cameron Dam by the T. A. Bruett Lumber Company, wholesale lumber, of Milwaukee, for the purpose of transferring the logs from the Thornapple dam territory to Winter, Wis., for shipment. The Bruett company purchased the logs from attorneys for Dietz and has a large motor truck on the grounds to aid in shipment. These logs were the source of much trouble several years ago. Most everyone remembers the notorious Dietz case which resulted in the conviction for life of John Dietz for the alleged murder of a deputy sheriff, Oscar Harp, who was killed during a battle between the Dietz family and officers. The Weyerhaueser Lumber Company was the original owner of the logs which were left on the Dietz farm by backwater when the Weyerhaueser company was driving logs on the Thornapple river about ten years ago. Dietz refused to allow the lumber company to remove the logs from his farm. Legal fights and actual battles with arms resulted, and after Dietz was captured and convicted the logs were sold to the Milwaukee company, which is about to remove them. The timber has deteriorated from insects and weather, but representatives of the Bruett company claim that it is in good condition and will yield from 300,000 to 500,000 feet of lumber.

Buskirk-Rutledge Lumber Company Buys Out J. W. Johnson Company

The Buskirk-Rutledge Lumber Company, Inc., Lexington, Ky., has succeeded the J. W. Johnson Company of that place, having bought out all interests of the Johnson company in the lumber business. The new company has a band mill at Quicksand, Ky., a band mill and three circular mills at Straight Creek, Ky., and two circular mills at Oneida, Tenn.

The Buskirk-Rutledge Lumber Company has recently moved its yard from Lexington, Ky., to Cincinnati, O., and is now located on the Queen and Crescent route at Brighton station in Cincinnati. The company also has a yard at Somerset, Ky., which it maintains for the purpose of assembling lumber. The main office will be retained at Lexington.

U. B. Buskirk is president and P. A. Rutledge is secretary and treasurer.

Perrine-Armstrong Company to Install Electric Drive

The first of the month the Perrine-Armstrong Company, the big hardwood operating concern of Fort Wayne, Ind., suspended operations long enough to enable it to install electric drive throughout the mill. The machines will be connected up in such a way that it will be possible to run any machine in the shop without operating any other machine. Three boilers and two engines were necessary under the old arrangement to provide sufficient power for the plant. One boiler will be retained for heating purposes and all the other similar machinery removed. It is anticipated that the work will be completed by July 1.

Ferguson-Palmer Lumber Company to Build Mill in Mississippi

The Ferguson-Palmer Lumber Company of Paducah, Ky., announces that it has preparations pretty well completed for the erection of a sawmill at Houlka, Miss. George Ingram of Paducah, who will construct the plant, is already at the seat of operations. In addition to the mill building, which will be 40 x 200 feet, various other buildings making up the plant will be constructed and in addition Mr. Ingram will build a home for Donald Palmer, who will have charge of the mill. In addition to the mill sctructure, the company will install some ten miles of railroad to tap its large timber holdings in that section. An investment of $50,000 will be involved.

Hill & Mount

Hill & Mount is the style of a new organization with offices in the Essex building, Newark, N. J., which concern has been incorporated to do a wholesale business in box lumber and box shooks. The incorporators are F. J. Hill, for years prominent in the box manufacturing trade of Newark, and J. T. and R. I. Mount. The two latter men are identified with the Gillett-Mount Company, also of Newark. All three men reside in East Orange, N. J.

New Furniture Factory in Texas

Reese & Carreker, who are building a new sawmill at Diana, Tex., five miles east of Beaumont, are also planning to establish a furniture factory in that connection. These people have a large supply of hardwood which they will work up, and also have extensive holdings of pine timber. An artesian well has been sunk to supply the plant with water and 1,500 feet of spur track have been laid by the Southern Pacific railroad. The foundation for the mill has been completed.

Fire in Yards of the J. A. McEntee Lumber Company

A fire which it is thought was of incendiary origin was discovered in a tool house of the J. A. McEntee Lumber Company in the west end of Cincinnati and located right on the Southern railway tracks, on the night of June 16. The fire had gained much headway when the fire department arrived and a general alarm was sent in on account of the threatening blaze and the close proximity of the yards adjoining of the Queen City Box Company. The theory on incendiary nature of the fire is supported by the fact that one Monday afternoon a small fire was discovered in one of the sheds, being caused by a large pile of oil waste such as is used in packing axles of freight cars, and a can of oil was later found under a nearby lumber pile. The small fire was quickly extinguished, but the one on June 16 was of such proportions as to entail a loss of about $5,000 before the firemen succeeded in getting it under control.

Long Legal Battle Settled

A long legal fight, which had been pending in Wisconsin, Michigan and Illinois for twenty-three years, has finally been settled with the payment of $26,000 to Attorney M. M. Riley, for the Union Trust Company of Chicago. When Hoxie & Mellor of Antigo went out of business, an assignment was made. This concern had taken over a contract from W. W. Hutchinson of Antigo which provided that the title of the timber on a tract in Gogebic county, Michigan, which Hutchinson purchased from Wilson H. Stubbings of Chicago in 1889, should remain with Stubbings until the purchase price was paid. Hoxie & Mellor sold the lumber to the Antigo Lumber Company. After the assignment was made the Antigo Lumber Company started replevin action after the Hoxie & Mellor property had been attached. It then gave a bond of $45,000 and shipped the lumber to Chicago. The National Bank of Oshkosh then instituted suit for foreclosure of the chattel mortgage, naming the Antigo Lumber Company, Stubbings and other attaching creditors as defendants. This suit was appealed to the Supreme court of Michigan, and Stubbings was awarded $17,000. Stubbings meanwhile

had assigned his interest to the Union Trust Company of Chicago. His claim was compromised for $12,000. The replevin suit resulted in a verdict of $76,000 for the Union Trust Company. A verdict of $43,869 was granted in a second trial and this verdict was affirmed by the Michigan Supreme court in 1907. Suit was then instituted against the Wisconsin replevin bondsmen, each being ordered to pay one-third. On April 19, last, the Shoemaker heirs were ordered to pay the Union Trust Company the balance. This was done Thursday, June 12. Of the original parties of the case only two, M. M. Riley, Milwaukee, and M. A. Hurley, Wausau, are living.

New Plant Montvale Lumber Company

The Montvale Lumber Company, of Fontana, Swain county, N. C., an allied house of the R. E. Wood Lumber Company, of Baltimore, Md., which is the sales headquarters of that concern, has recently rebuilt its band mill and made sundry improvements in its operations at this point. The Montvale Lumber Company is the owner of the splendid timbered Eagle Creek Valley, which opens up to a branch of the Murphy division of the Southern Railroad at Fontana. This timber largely consists of oak, poplar and chestnut, and is one of the finest, if not the finest, stands of timber in the entire eastern mountain region.

The expert manufacturing genius of the Montvale Lumber Company is G. Leidy Wood, and the company is indebted to him for the splendid economical and high-class operations that are being carried out. Mr. Wood personally superintended the rebuilding of the company's mill which now ranks second to none in that entire country.

The pictures accompanying this article are self-explanatory. This is only one of the several lumber operations that is controlled by the Wood interests. Altogether the various timber holdings and sawmill operations of this company are one of the most important in the country. The products of the several plants are all handled through the office of the R. E. Wood Lumber Company, Continental building, Baltimore, Md.

Change in Baird-Coale Lumber Company

George W. Coale, partner with Dan W. Baird in the recently incorporated Baird-Coale Lumber Company, with offices in the Fisher building, Chicago, withdrew from that concern on Saturday, June 14, and has returned to Houston, Tex. Mr. Coale was associated with Mr. Baird to look after the yellow pine end of the wholesale and commission business of the Baird-Coale Lumber Company, but his withdrawal from the concern will take that company out of the yellow pine field entirely. Mr. Baird is continuing and will continue at the same offices, doing as heretofore a wholesale and commission business in southern hardwoods. He has not yet definitely decided as to future plans relative to the name and incorporation of the present company, but for the time being will continue to operate as the Baird-Coale Lumber Company. He will probably resume the old style—J. W. Baird Lumber Company—some time in the future.

Developments in Bossert Case in New York

An interesting development, the result of the recent suit brought by the firm of Louis Bossert & Son, trim manufacturers of Brooklyn, against the Carpenters' Union and others, came to light with the bringing of a suit for damages against the union and certain trim manufacturers. The suit is brought for damages to the Bossert firm sustained, it is alleged, through the spies of opposition manufacturers of trim who followed the Bossert trim to buildings where union carpenters were employed, and then called strikes on the jobs.



VIEWS AT THE OPERATIONS OF THE MONTVALE LUMBER COMPANY, FONTANA, SWAIN COUNTY, N. C.
1—Rough and Tumble Rollways; 2—Loading Big Poplar and Oak Logs; 3—Trainload of Logs Crossing Trestle Over Eagle Creek; 4—The Log Pond and New Sawmill.

Attorneys for Louis Bossert & Son state that formerly the Bossert firm sold $500,000 worth of trim annually in Manhattan and the Bronx, but much of this business has been lost because builders feared to use the material lest strikes would be called. Among manufacturers of trim named as defendants in the suit are the Empire City-Gerard Company, the Murray & Hill Company, the Harlem River Wood Working Company, the Jamestown Mantel Company, the Meisel-Danowitz Company, the Niagara Woodworking Company, Levin, Kronenberg & Co., the Batavia & New York Woodworking Company. Several individuals connected with these firms are also named.

It is alleged that through a compact between the carpenters' union and the union trim plants the manufacturers agreed to operate union shops on condition that the union protect them against the competition of the non-union shops, and prevent the use of the latters' materials by calling strikes. The result of this has been to close Manhattan to the open trim shop and debars the public from the benefit of competition in this material.

This is another chapter to the history of the so-called trim suits and the final outcome is awaited with interest by manufacturers of trim, not only in New York but throughout the entire country.

Old Zeb Evans

In this connection is shown a photograph of Zeb Evans, probably one of the oldest active participants in the manufacture of forest products. While he has now retired to Los Angeles, where he is enjoying the pleasures of a well spent life, he is still, though eighty-four years old, capable of taking an active part in woods operations and spends his days trimming off the tops of butchers' blocks.

Zeb says that he can take a cross-cut saw and make a cut a sixteenth of an inch clear across the top of the biggest butcher block. His preference runs to Atkins silver steel saws, which he has used for nearly sixty years. The old man says that he has cut timber in the wilds of Indiana and then, when the center of the hardwood industry moved southward, down through the southern states. He enjoyed all kinds of pleasure, he says, in his day, but none has equalled the satisfaction he has derived from pulling the high-class saw turned out by the Atkins people.

Zeb Evans is a second cousin of the famous "Fighting Bob" Evans.



"OLD ZEB" EVANS

Biltmore Doings for May

"Biltmore Doings," recording the work of the students of Biltmore Forest School, says that the school arrived on May 1 at Biltmore, N. C., where it made a close study of the famous Biltmore estate, observing the results of the work of Dr. Schenck during his years as forester for that estate. The students were very much surprised to find that the white pine plantations made seventeen years ago are even now yielding timber of merchantable size. Stands twenty-one years old will yield over 10,000 feet board measure of box lumber to the acre. The students also observed other plantations of the various species and mixtures of species, and looked into the fuel wood and tannic acid industry developed by the doctor.

The students, on leaving Biltmore, went to Sunburst, N. C., the seat of the operations of the Champion Lumber Company, where they are in the heart of an immense operation yielding 150,000 feet per ten-hour day. The students were given the freedom of the woods and mill and given every assistance by those in charge. They were given an opportunity of studying highly efficient methods of logging and lumbering in rough country, noting the operation of both the Clyde and Lidgerwood systems of aerial skidding. There is considerable competition between the crews of the two types of skidders as to which can do its logging in the most inexpensive manner, which condition presents the work to the students in the most favorable manner.

Regular surveying trips were taken during May, notable among these being a preliminary survey on a mountain stream where the students laid out preliminary lines for skidding operations. Interesting trips were also made to the splash dam, pole chutes, narrow gauge railroads and other contrivances used for conveying logs and pulpwood.

The whole stay at Sunburst will cover about six weeks, during which time the students will be thrown in close contact with every form of practical work.

Lumberman's Son Wins Honors

Birchall Hammer, son of Thomas B. Hammer, head of the Hammer Lumber Company, Philadelphia, was awarded the William West Frazer prize of $100 for the highest scholarship of the athletes composing the track, baseball, crew and football teams. He is a member of the class which graduated at the University of Pennsylvania, June 17, is prominent in athletics and a leader in college affairs. He is a lineal descendant of Dirk Keyser, and also, through his mother, a descendant of Weigert Levering, two of the original settlers of Germantown, in 1683.

Minnesota Rate Decision Important to Arkansas Lumbermen

The state's victory in the Supreme court of the United States in the railroad rate cases is the principal topic of discussion in Arkansas busines circles at this time. The people are rejoicing over this, the first victory in the state's fight against the railroads in the matter of the two-cent passenger and the maximum freight rate as fixed by the Arkansas Railroad Commission under the act of the Arkansas Legislature of 1907.

The act over which this contention has been raised between the railroads and the Arkansas Railroad Commission was passed by the General Assembly of 1908, and provides that all railroads of fifteen miles in length or less are limited to a charge of five cents per mile for passengers; those lines of more than fifteen miles and not over eighty-five miles in length are limited to three cents per mile, while those of more than eighty-five miles in length are limited to two cents.

In the early part of 1908 the Arkansas Railroad Commission, under the authority of the act of the legislature, prescribed certain maximum freight rates for the various lines, as well as the maximum passenger rate as provided in the act. Shortly after this new tariff had been published by the Arkansas Railroad Commission eighteen railroad companies brought suit in the United States circuit court at this place, seeking to enjoin the commission from enforcing the revised tariff rates. Upon application being made, Judge Jacob Trieber, United States district judge for the eastern district of Arkansas, granted a temporary restraining order against the commission which, after testimony had been taken during the years of 1909 and 1910 in the federal courts at St. Louis and Chicago and in the federal court at Little Rock in 1911, was made permanent by Judge Trieber, upon the theory that the rates as fixed by the Arkansas Railroad Commission under the new schedule were confiscatory.

Shortly after the restraining order was issued in 1908 the Arkansas legislature made an appropriation of $50,000 to be used in employing counsel and in paying the necessary court costs in an effort to prevent the enforcement of the temporary injunction, and again in 1911; after Judge Trieber had made the injunction permanent against the railroad commission the legislature appropriated an additional $12,000 to be used in appealing the case to the United States Supreme court. The transcript was lodged in the Supreme court in the fall of 1911, and argument was heard by that court in the spring of 1912. However, final decision was not given in the case until this week.

Under the decision of the Supreme court, as handed down by Justice Hughes, the injunction was dissolved, and the rates as fixed by the Arkansas Railroad Commission were upheld. It will be necessary for the railroads in Arkansas to prove more convincingly that these rates are confiscatory before a permanent injunction will lie.

This is one of the first developments following the now famous Minnesota rate case decision of the United States Supreme Court.

Southern Roads Advance Rates to Ohio Crossings

The Louisville & Nashville railroad announces changes in various rates from local points in Tennessee to Ohio river crossings. It is anticipated that other roads will follow suit, following the institution of increases at competitive points.

The actual increase is on the average not large, there being some two-cent advances, while the bulk are but one cent. The objection to be raised, however, is that , there being such a large number of advances in the new tariffs submitted, the aggregate will result in a very material additional burden.

Afraid of Agitation

Lumber operations in the Philippines appear to respond quickly to agitation affecting political affairs. A London trade paper reports that "the largest lumber mill in the Philippine islands has suspended operations because of agitation over the Jones bill now pending in Washington which grants independence to the Philippines."

R. J. Darnell, Inc., Has Big Fire

The double band mill and veneer plant of R. J. Darnell, Inc., Memphis, Tenn., was destroyed by fire on June 15. It has been impossible to obtain any idea as to the cause of the fire, which raged the greater portion of Sunday. With the exception of the boilers all of the machinery was ruined. The fire also destroyed more than 2,000,000 feet of lumber and veneers. It is estimated that the loss was from $100,000 to $125,000, fully covered by insurance. R. J. Darnell, head of the firm, has refused to give any statement of the loss, but this is regarded as conservative. A number of cars on the siding of the Yazoo & Mississippi Valley road were also burned; in fact, the fire was the most disastrous which has occurred in lumber circles here for years.

A full statement concerning the plans of the company with reference to rebuilding and with regard to taking care of its business while the plant is being rebuilt will be found in the regular Memphis correspondence.

Ruth-Trier

On Wednesday evening, June 11, Adolph H. Ruth, Chicago manager of the G. W. Jones Lumber Company, of Appleton, Wis., was married to Miss Marie Trier, daughter of Mr. and Mrs. Philip G. Trier, 423 North Elmwood avenue, Oak Park, Ill. At the same time Miss Trier's sister, Clara, became the bride of C. I. Carter, of Boston, Mass. The ceremony took place at the Second Congregational Church in Oak Park, and was performed by the Reverend Carl C. Morrison, of the Sacramento Boulevard Christian Church of Chicago. He was assisted by the Rev. Edwin D. Gaylord, pastor of the church in which the ceremony took place. Twin sisters, Beulah and Lulu, acted as bridesmaids, and Miss Edna, another sister, was maid of honor. Paul G. Trier, Jr., a brother, was master of ceremonies. Following the ceremony there was a reception at the home of the brides.

The lumber trade of Chicago, both in the matter of presents and presence, demonstrated the regard with which Mr. Ruth is held in the local trade.

On Thursday evening Mr. and Mrs. Ruth left on their wedding trip to the West. After Aug. 1 they will be at home at 6248 Wayne avenue, Chicago.



A. H. RUTH, CHICAGO MANAGER G. W. JONES LUMBER COMPANY, APPLETON, WIS.

Little River Lumber Company Employes Enjoy Outing

The third annual picnic of the employes and their families of the Little River Lumber Company and the Little River Railroad Company of Townsend, Blount county, Tenn., was held at Elkmont, Sevier county, Tenn., on Saturday, June 14. This annual outing as a method of entertaining their employes was started by these companies three years ago and has been a remarkable success.

The picnickers started on a special train leaving Townsend early in the morning and carrying them through the winding gorges and the magnificent mountain scenery along the beautiful Little river to Elkmont, where a park specially provided for the purpose was in readiness to receive the crowd.

All were well furnished with provisions for the occasion and Mrs. W. B. Townsend, wife of the president of the Little River Lumber Company, presided over the necessary culinary arrangements.

While preparations were going on for the spread, short speeches were indulged in and there was music during the meal.

Following the luncheon, a baseball game was played between the "Rexalls," of Maryville, Tenn., and the Little River Lumber Company team, known as the "Townsends." The Townsends, although this was their first game, won by a score of 18 to 3. After the game the various members of the party spent the afternoon in exploring the woods, climbing the mountains, etc. They left on the same special train about five in the afternoon.

Horn-Williams

Stanley F. Horn, popular member of the staff of the Southern Lumberman of Nashville, Tenn., was married on Thursday, June 12, to Miss Beryl Williams of Nashville. The ceremony was performed by the Rev. Mercer P. Logan, of St. Ann's Church, Nashville. The bride and groom left on a tour through the East, going via Savannah by boat to New York.

To Improve Levees Around Helena

It is announced that the levees around Helena, Ark., will be improved in a very material way, by raising and straightening, in the near future. Several hundred thousand dollars have been appropriated for this purpose, and the work will involve the levees in the various districts in and around the city of Helena, and also the levees south from this city to the mouth of the White river, fifty miles away. The levees will be brought up to the standard height and strength prescribed by governmental engineers.

Death of T. H. Culley

T. H. Culley, who has been connected with the Walker Veneer Works, of Alpena, Mich., for over five years as a traveling salesman, passed away on June 1 at Jamestown, N. Y. Mr. Culley was held in high esteem by his firm, which regards his death as a distinct loss. His work was mostly among the veneer consuming trade in the eastern territory where he sold the high-grade bird's-eye maple veneer turned out by this company. The deceased will be succeeded by his brother, W. J. Culley.

Consolidation of Hardwood Interests

The Hooton Hardwood Company is the style of a newly incorporated organization with offices at 508 Wright building, St. Louis, Mo. This concern is made up of the consolidation of the former Hooton Hardwood Company, St. Louis, the R. A. Hooton Lumber Company of Terre Haute, Ind., and the Wabash Hardwood Company of Memphis, Tenn. The consolidation took effect on June 16, the company to do a general wholesale hardwood business.

R. A. Hooton of Terre Haute is president; R. U. Fletcher, vice-president; W. J. Stuebe, secretary, and J. T. McRoberts, treasurer. Mr. Fletcher and Mr. McRoberts will be the active factors in the business, the former doing the buying, and the latter attending to the office and sales.

Late Glasgow Market Report

The timber trade in Glasgow and the west of Scotland since last report has displayed a continued tendency to dullness. In some cases prices are inclined to be easier than they were, but taken as a whole are well maintained. Though the movement in box-making material is slow, the high import cost does not admit of any easing of prices, cargo quotations being as firm as ever. Pitch pine is hardly so firm as it was, in sympathy with cheaper freights, but there is no pronounced weakness. Imports which continue on a moderate scale are largely made up of deliveries against contracts. Ex quay sales and also from yarded stocks are few, buyers evincing no desire to cover other than against immediate wants.

American ash logs have come forward in quantities much in excess of this market's requirements, and it has been necessary to store in several instances. Logs against contracts have not been up to standard quality, with the result that numerous logs have been rejected. Not much Canadian spruce has come in so far. A cargo arrived two days ago from Miramichi, but is against contract with the largest buyers of spruce, who import thousands of standards yearly. Birch logs still come in by each succeeding boat, and this explains the small import of birch planks.

The quiet conditions prevailing are no doubt due to some extent to the fear of further labor troubles in shipbuilding, which are again assuming an acute phase. So far as can be learned, inquiry has dwindled away to nothing, due to owners being daunted by high prices, coupled with the extreme uncertainty regarding delivery, for both of which factors the works are responsible. This means that unless matters in this respect improve there will be a sudden dearth of employment about September or October, for there is nothing like the amount of new tonnage to go on as the present orders are worked off.

Cornell University Receives Gift

The Department of Forestry at Cornell University, Ithaca, N. Y., has benefited by a gift of 200 acres of land. This generosity has endowed the forest school with a larger working field as former gifts have been made to the Forest School comprising eight woodlots and a farm of thirty-eight acres growing up to hardwoods and white pine and hemlock. The lands so given present a wide variety of silvical conditions and will afford a broad experimental field for the students to work in. None of the lands so far lie more than three miles from the campus of the university. Those of the Harvard and Yale Forest schools lie at some distance and do not present a much more silvicultural difference by their remoteness. Cornell is fortunate in possessing a working field close by the campus where the student can devote more time to varied studies. The new forestry building has already had the ground broken and it is expected that construction will go forward rapidly.

Move Mill

The Roper-Reese Lumber Company of Elkport, Ky., is absorbing the business and plant of the Yale Lumber Company of Yale, Ky. Both these operations are run by Mishawaka, Ind., consuming interests, and the new company is merely another incorporation of those interests, for the purpose of taking over the Yale Lumber Company's operations and moving the plant to a new timber supply. It is expected the plant will be ready for operation inside of three months. The mill will manufacture mainly oak and poplar, the company having some 11,000 acres of hardwood timber. In addition to the regular sawmill machinery, all of which will be new, the company will install veneer saws.

Hamburg Market for May

Report from a large firm of wood brokers at Hamburg, Germany, states that general business conditions during the month of May were fair and all that could be expected. Prices in forest products were steady. The report states, however, that though the political situation is more settled than formerly, business conditions have not yet reached their normal state. The prospects for the coming months, however, do not look unfavorable.

The demand for white oak in the Hamburg market continued active, and returns for the better grades were very satisfactory. The report states that the volume of business done would be larger if buyers were not hesitating a little in consenting to pay higher prices.

There was the usual good call for black walnut, especially for the better grades. If shippers were not so reluctant in making offers, larger transactions could be made. Common grades and culls were but moderately asked for.

During May there was a fairly good inquiry for sap and tupelo gum with firm prices prevailing. Trade was somewhat quiet in cottonwood, although prices held.

Illustrating an Excellent Gravity Lumber Carrier

In the May 10 issue of HARDWOOD RECORD, on page 21, there was described in detail a comprehensive and highly efficient method of handling lumber on cars and in the yards by means of a ball-bearing conveyor, requiring merely an incline to transport lumber and various other forest products from one point to another. Since the publication of this story the Mathews Gravity Carrier Company, of Elwood City, Pa., mentioned in the article, has sent in an illustration which appears on this page, showing the construction and operation of the carrier manufactured by it and the efficiency and facility with which the conveyor transports lumber from freight cars.

The Mathews Gravity Carrier Company recognizes that such a contrivance must be absolutely accurate in order to be efficient. Hence, the greatest care has been exercised in the design and construction of this product, in order that it may be perfectly aligned and stay in perfect condition. The carriers are of all-steel construction fitted with improved ball-bearings. The supports are instantly adjusted for any level, hence the conveyor can be arranged so as to transport lumber from any point to any other point desired in a very economical and expeditious manner.

New Cableway Skidder

From Sunburst, in the Little Smoky mountains of North Carolina, comes the account of a new overhead cableway skidder particularly designed for use in mountain logging. This machine is a radical departure from all former types of cableway skidders, and judging from its reported capacity developed over a considerable period of time is a very decided improvement in machines for this difficult work. It was designed and built by the Clyde Iron Works of Duluth, Minn., after long and careful experiment.

A great saving in time and cost is secured by the fact that this new machine carries its trolley line on a special power-driven drum, and is equipped with outhaul and setting lines, which carry the heavy trolley line out under power. Thus the necessity for carrying this long, heavy cable up the steep mountain-side by hand or animal power is done away with. When it is time to make a new set, all that is necessary with the new machine is to cast off the trolley line from its anchorage, throw in the clutch on the trolley line drum and wind the line up under steam power at high speed. The ease and rapidity of the operation obviates the necessity for a second trolley cable to be set while the first is being used.

All lines on the new machine lead from different points on an inclined boom, doing away with the thrashing and tangling of lines, which is a constant cause of breakage and wasted time on the older machines. This boom is of steel and is secured by a trussed steel back-brace.

The new skidder is self-propelling, having sufficient tractive power to propel twice its own weight up a ten per cent grade. It requires a crew of only six men, as against ten or twelve required with other cableway skidders of much smaller capacity.

Under average mountain conditions the new machine developed a capacity in excess of 25,000 feet of logs daily, as against less than 8,000 feet for a big tower machine working under the same conditions.

Two of these machines are in daily use at Sunburst, and on the strength of the showing made by them another of the same type has been ordered for the Little River Lumber Company of Townsend, Tenn., whose logging conditions are similar to those at Sunburst.

Married—Joseph P. Murphy

HARDWOOD RECORD acknowledges the receipt of an announcement from Mr. and Mrs. Alva Curtis Cochran, of Knoxville, Tenn., of the marriage of their daughter, Iva Pearl Cochran, to Joseph P. Murphy, which occurred at Knoxville on Tuesday, June 17.

Mr. Murphy is superintendent of the Little River Lumber Company and of the Little River Railroad, Townsend, Tenn., and is one of the most competent, all-around railroad men in the country. His bride is one of the charming and handsome belles of Knoxville.

HARDWOOD RECORD wishes to heartily congratulate both the bride and the groom.

Want Further Hearing on Through Bills on Export Shipments

The Southern Hardwood Traffic Bureau is making a strenuous effort through John R. Walker, attorney, to secure another hearing before the Interstate Commerce Commission in the case of the Anderson-Tully Company which involves the issuance of through bills of lading on export shipments of lumber over the west side lines by way of New Orleans. It is understood definitely that the railroads and steamship companies have been unable to reach an agreement regarding the issuance of through bills and the absorption of demurrage charges at New Orleans by the steamship companies at that point. June 23 was the date which was fixed for the expiration of the agreement as between the steamship companies and the west side lines covering through bills and the absorption of demurrage charges and, with the expiration of this agreement, matters are in a highly unsatisfactory state for exports of lumber, cotton or other commodities. The Southern Hardwood Traffic Bureau is taking this subject up with unusual vigor at the moment. Conferences are scheduled for the immediate future and heavy pressure will be brought to bear upon the Interstate Commerce Commission to secure a ruling similar to that handed down in the case of cotton shippers in Texas to the effect that, if the steamship companies were willing to accept through bills, the commission would force the Texas roads to issue such documents. There is not an exporter in this city nor a member of the Southern Hardwood Traffic Bureau who does not fully appreciate the value and utility of through bills of lading as an aid in the handling of export business and it is because of this fact and because of the apparent disposition of the roads to discriminate as between cotton and lumber that the lumber exporters here are so determined to go after this matter and bring the subject to an issue. The matter has been allowed to remain in abeyance for the past few weeks in the hope that the steamship companies of New Orleans on the one hand, and the east and west side lines on the other, would be able to reach an agreement that would make it unnecessary to abrogate the expiring terms.



MODERN METHOD OF UNLOADING LUMBER.



CABLEWAY SKIDDER BUILT BY CLYDE IRON WORKS, DULUTH.

Pertinent Information

Boosting Birch

Secretary R. S. Kellogg, in conjunction with the advertising committee of the Northern Hemlock and Hardwood Manufacturers' Association, has made quite a name for himself as an advertising man. Working in conjunction with Chairman M. C. McCullough of the advertising committee, he has gotten out some mighty live literature in the form of letters, booklets, etc., which has very materially increased the sale of birch and hemlock of the members of that association.

One of the latest ideas in connection with the birch campaign is a series of ten birch panels of eighth-inch stuff with various finishes which can be successfully used on that most excellent wood. The panels are arranged on two tapes and can be hung up conveniently on a small space. The finishing material is all of the highest grade obtainable and shows up the beauty of the wood to the best advantage. A large number of these samples will be sent out to architects and builders in various parts of the country and will unquestionably result in increasing the already active demand for birch.

Bulletin of Lumbermen's Underwriting Alliance

According to bulletin number 63, issued by the Lumbermen's Underwriting Alliance at Kansas City, the number of fires at lumber manufacturing plants this spring is in excess of the number of fires last spring. The causes of fires at saw and planing mills are few and, aside from fires caused by the exposition of one building to a conflagration at another building and, in addition, from lightning, it is probable that ninety-eight per cent of all fires listed were caused by the spark hazard, the friction hazard, and the electric hazard. Under the first heading are included sparks from locomotives, boiler stacks and slab fires and the various hazards created by smokers. The friction hazard is created by any friction of two surfaces, including hot bearings. The electric hazard includes all dangerous features developed by electric equipment, such as short-circuiting, the formation of the electric arc, over-fusing, and overloading.

The fire danger from any of these causes should be eliminated in any well-watched mill that is kept clean. Combustion at the start is frequently retarded if the only fuel and vehicle for fire is a clean floor planking and clean, well white-washed timbers and lumber comprising the structure itself. The usual fire-fighting equipment and facilities promptly brought into action will, in most cases, speedily put such fires under control. There is, however, no known means which can be relied upon to save the mill if flames feed on dry sawdust and debris. In other words, continuous cleanliness in mills is absolutely essential to the entire prevention of destruction by fire. Without cleanliness all other safeguards and helps become ineffective.

Indiana Forestry Report

The State Forestry Board of Indiana has issued its twelfth annual report in the form of a book of 180 pages. The compilation is by Charles C. Dean, secretary. Indiana was once a great timber state and it yet stands high in production. The process of gradually working round from natural forests to cultivated timber lots is slowly taking place. The forest, in the old sense of the word, is largely a thing of the past there, but much logging is carried on by cutting timber on farmers' lots. Little headway has yet been made in tree planting for commercial purposes, but the movement is under way. The present report devotes considerable space to that subject, and a very important feature is a list of trees which ought not be planted. It is poor business to waste time and money planting a scrub tree when a good one is as easily planted. If some such advice on the subject had been given the western people thirty or forty years ago, some millions of box elders, soft maples, catalpas and green ashes would not have been planted, but better trees would have occupied timber claims, roadsides and door yards instead.

Prospective tree planters in Indiana are furnished with lists of suitable trees for planting, and information is supplied as to the rate of growth that may be expected of the various kinds.

A valuable feature of the Indiana report consists of an outline course in forestry study for the public schools. The instruction is, of course, very simple, but it is practical and if carried out it will doubtless accomplish much good. This study is not designed to turn out technical foresters, but it will open the way to a better understanding of the planting, care and value of trees.

An Instrument for Locating Forest Fires

Step by step we are moving on to better methods of fire-fighting. One of the latest innovations in fire-fighting equipment is what is known as the "Eric Outlook Table," which was invented by F. B. Knapp, an engineer and forester.

It is used in systems of fire protection which use the lookout station. The lookout watchman is stationed where he can watch a wide expanse of country. He is equipped with telephone connection, field glasses and the "Eric outlook table." The latter is the key to the situation. When a fire is discovered, it is sighted to by an alidade lying horizontally over the "Eric outlook table." This table is no more than a topographical map of the region which falls within the watchman's eye, showing all of the mountains, hills, valleys, railroads, huts, streams, roads, trails, oriented with divided circle and alidade, pivoted at the center.

This alidade measures off the exact compass direction of the fire—just like a pilot compass. The watchman telephones his compass direction of the fire to another away off on some other lookout station, who immediately gets his reading. Where the two readings intersect the fire is located. It is now only a matter of men, tools and food to put it out.

In the past, in some cases out West, some of America's biggest forest fires were unavoidable because they could not be located within several days.

The New Hampshire State Forestry Department has adopted this new invention and is finding it of the greatest value in locating forest fires and in putting a fire fighting force into the field quickly.

Building Operations for May

Sixty-five cities issued building permits during the month of May to the total value of $80,609,773, compared with a total value of $78,209,529 for May last year, an increase of 3 per cent, as shown by reports received by the American Contractor, Chicago. This is a gratifying showing, in view of the fact that for the month of April the building operations showed a decrease of about 6 per cent, as compared with the corresponding month in 1912, and also in view of the fact that both New York and Chicago reveal during May a somewhat lessened activity than a year ago. Of the 65 cities gains were made in 28 and losses in 37. The most notable increases, together with percentages, were made by the following: Birmingham, 151; Bridgeport, 114; Dallas, 256; Pittsburgh, 117; South Bend, 99; Spokane, 99; Worcester, 95; Detroit, 87; Cedar Rapids, 83.

For the five months ending May 31, building permit reports from 65 cities show total costs of $289,148,595, compared with $298,545,903 for the first five months of 1912, a decrease of 3 per cent.

City—	May, 1913. Cost.	May, 1912. Cost.	—Per Cent— Gain.	Loss.
Akron	$ 584,380	$ 454,800	29	..
Albany	399,665	453,540	..	11
Atlanta	771,657	778,089	..	1
Baltimore	835,147	830,502	1	..
Birmingham	969,227	385,340	151	..
Boston	2,538,900	1,188,075	114	..
Bridgeport	249,672	.....	..	..
Buffalo	1,568,000	1,889,000	..	17
Cedar Rapids	293,000	160,000	83	..
Chattanooga	70,390	90,640	..	22
Chicago	8,925,500	10,373,200	..	14
Cincinnati	790,572	785,777	1	..
Cleveland	1,958,025	2,014,207	..	3
Columbus	613,338	507,122	3	..
Dallas	1,107,405	310,923	256	..
Denver	244,430	586,000	..	62
Detroit	3,900,645	2,088,075	87	..
Evansville	183,859	136,457	35	..
Ft. Wayne	237,250	304,815	..	22
Grand Rapids	320,957	287,044	12	..
Harrisburg	124,050	239,025	..	48
Hartford	674,530	731,580	..	8
Indianapolis	1,088,479	841,895	29	..
Kansas City	1,129,660	1,446,705	..	22
Lincoln	113,485	131,095	..	13
Los Angeles	3,735,410	2,277,410	64	..
Manchester	206,917	201,658	3	..
Memphis	417,412	684,435	..	39
Milwaukee	1,391,591	1,244,849	12	..
Minneapolis	1,260,645	955,260	32	..
Nashville	117,275	156,444	..	25
Newark	1,683,705	1,290,469	30	..
New Haven	351,936	463,021	..	24
New Orleans	417,086	342,617	22	..
Manhattan	5,926,544	13,750,748	..	57
Brooklyn	3,091,270	4,722,274	..	34
Bronx	3,247,934	4,303,269	..	24
New York	12,265,748	20,776,291	..	41
Oakland	1,357,077	1,203,137	13	..
Omaha	477,000	590,020	..	19
Paterson	148,360	228,597	..	35
Philadelphia	4,170,095	3,996,785	4	..
Pittsburgh	2,541,716	1,171,709	117	..
Portland	848,530	1,528,496	..	44
Richmond	292,651	507,030	..	42
Rochester	1,078,387	1,256,504	..	14
St. Joseph	90,525	161,615	..	44
St. Paul	1,072,903	936,063	15	..
St. Louis	1,392,655	1,983,853	..	30
Salt Lake City	240,775	399,025	..	40
San Antonio	275,156	573,604	..	52
Scranton	140,537	144,355	..	3
Seattle	683,380	738,110	..	7
Shreveport	158,070	123,153	28	..
Sioux City	159,135	183,172	..	13
South Bend	223,030	112,090	99	..
Spokane	1,776,066	892,660	99	..
Springfield	120,040	120,292	..	..
Tacoma	231,902	137,195	69	..
Toledo	479,930	1,392,054	..	65
Topeka	109,804	100,950	9	..
Troy	102,066	112,560	..	9
Washington	976,332	1,599,330	..	39
Wilkes Barre	53,256	158,808	..	66
Worcester	883,747	452,002	95	..
Total	$80,609,773	$78,209,529	3	..

A Valuable Idea of the Forest Service

The Forest Service has undertaken to assist students and others in forestry along research lines by the publication of something entirely new in bulletins. The first volume has already come from the public printer's hands, which was of an introductory nature. Hereafter, however, the prime object of the series will be followed and will keep all foresters engaged upon investigative work in touch with each other and the results of each study as it develops. The publication will go beyond the doings

of Forest Service men and include material furnished by state foresters and the work of forest school men.

The topics which will be of especial interest to lumbermen will come under products and silviculture and will fill a need felt for some time by men who are investigating studies of practical interest to lumbermen.

Tennessee Summer Resort Country

Superintendent J. P. Murphy, of the Little River Railroad, which is owned by the Little River Lumber Company, in connection with the Knoxville & Augusta Railroad, has just put out a handsome illustrated folder showing the beauties of the Elkmont country, which is the seat of the logging operations of the Little River Lumber Company. This region is one of the most picturesque and beautiful in the United States, and the climate is not excelled in salubrity by any other part of the country. In picturesque features it is very alluring to the camper and sportsman.

The scores of branches of the Little river down to the gorge, in which the railroad runs, abound in mountain brook trout, while the lower reaches of the main river are well stocked with rainbows. The region is fast being built up with club houses and modest hotels, where the resorters can be well housed and fed.

The Elkmont region is about seventy-five miles southeast of Knoxville, and is reached by the Knoxville & Augusta and Little River railroads. It lies immediately below the great tops of the highest ridges of the Great Smokies—Clingman's Dome, Siler's Bald and Thunderhead—in the center of the government's new Appalachian timber property, and promises to become one of the best known resort regions of the entire United States.

Anyone interested in this region can secure a copy of the illustrated folder on application to Superintendent J. P. Murphy, at Townsend, Tenn.

Wisconsin Legislature Enacts Standard Log Scale

Lumbermen are interested in a bill which has been made a law by the present legislature establishing a standard scale of log measurements. It is known as the log scaling bill and reads as follows:

An Act to repeal section 1737 of the statutes, and to create a new section to be numbered 1737, relating to the standard scale of log measurement.

The people of the state of Wisconsin, represented in Senate and Assembly, do enact as follows:

Section 1. Section 1737 of the statutes is repealed.

Section 2. There is added to the statutes a new section to read: Section 1737. The standard rule for scaling or measuring logs in the said districts shall be in accordance with the following table, showing in the first column the diameter of log at the small end in inches, at the head of each other column the length of log in feet, and in the body of such other columns the resultant contents of each log in board measure feet of lumber, to-wit:

*STANDARD SCALE OF LOG MEASUREMENT

Diameter of log at small end in inches.	Length of log and board measurement in feet.						
	12.	14.	16	18.	20.	22.	24.
6	10	10	20	20	20	30	30
7	20	20	30	30	30	40	40
8	20	20	30	30	30	40	40
9	30	30	40	40	40	50	60
10	30	40	60	60	70	80	90
11	40	50	70	80	80	90	100
12	60	70	80	90	100	110	120

*The table covers logs up to forty inches in diameter but was cut down as shown for convenience.

Other rules may be used at the request of the owner of logs; but in all such cases the bill of the inspector shall state by what rule the logs were scaled or measured.

Section 3. This act shall take effect and be in force from and after its passage and publication.

Poles Purchased in 1911

Statistics of the number of wooden poles purchased in the United States in 1911, by steam and electric railroads, electric light and power companies, and telephone and telegraph companies, are presented in a bulletin soon to be issued by the Bureau of the Census. In 1911 the total purchases of poles in the United States amounted to 3,418,020 sticks of timber. Of these, 2,402,724 were purchased by the telephone and telegraph companies; 787,649 by the electric railroad and electric light and power companies; and 227,647 by the steam railroads. The total number of poles purchased represents a decrease of 452,674 as compared with 1910, and of 320,720 as compared with 1909; but it exceeds the totals for 1908 and 1907 by 168,866 and 134,752, respectively.

The decrease in the purchases of 1911 as compared with 1910 was confined to telephone and telegraph companies and steam railroads, while substantial increases in purchases were reported by the electric railroad and electric light and power companies.

The woods used for poles in the United States are chiefly those which are naturally very durable in contact with the soil. The life of timber under this condition varies considerably according to the species, to differences in the wood of the same species, to the character of the soil, and to climatic conditions. Cedar, chestnut, cypress, juniper, and redwood usually last from ten to fifteen years, while white oak has an average life of somewhat less than ten years.

The resistance of the poles to decay can be considerably increased by the use of preservatives. Wood preservation is now on a firm footing in the United States, but the advantages which this practice affords are by no means fully utilized by pole consumers. Preservatives not only add from three to fifteen or more years to the service of the woods now commonly used for poles, but also make it possible to use cheaper woods which in their natural condition lack durability in the soil, although possessing all the other qualities necessary in pole timber. The durability of woods which ordinarily last but a few years can thus be increased to more than double the normal life of cedar.

The principal preservatives used for treating poles are those classified as refined coal-tar oils. Under this heading are included creosote oil and various proprietary preservatives. Creosote oil was used in treating 159,321 poles, of which 50,021 were cedar and 83,035 yellow pine.

The cost of treating poles varies according to the wood treated, the kind of preservative and quantity used, and the process employed, but it is only in rare instances that the adoption of a pole-treating policy is not economical. The United States Forest Service has a large number of poles treated by different methods under record and subject to annual inspection in order to determine the relative values of the different methods and preservatives.

The following table shows the total numbers and principal kinds of poles purchased by the several classes of consumers from 1909 to 1911, inclusive:

Kind of wood.	1911.	1910.	1909.
Total	3,418,020	3,870,694	3,738,740
Cedar	2,100,144	2,431,567	2,439,825
Chestnut	693,489	677,517	608,066
Oak	199,590	265,290	236,842
Pine	161,690	184,677	179,586
Cypress	72,995	75,459	77,677
All other	190,112	236,184	196,744

Experimental Tie Treating

Much has been published upon the durability of railway ties treated by various preservative processes, but there is little available information concerning ties treated by different processes and laid in one track, where the treatments could be compared. In order to gather data for such a comparison the Forest Service has completed the first stage of an extensive experiment the purpose and scope of which are given in bulletin 126. The ties used in the experiment were ordinary stock, and 100 of each of the two species, red oak and hard maple, were treated by each of six processes, selected so as to include at least one from each general type of pressure processes in common use. Thus, there were treated for the experiment 600 red oak and 600 hard maple ties, and 100 untreated ties of each species were laid. The history of each tie up to the time of laying is recorded, the preservative processes described, the methods of handling and laying given in detail, and everything needful for comparison of results of future inspection carefully worked out.

In selecting a location for the test track the effort was to secure normal conditions of site and traffic. The location is on a single track of the Chicago, Milwaukee & St. Paul railroad, which carries a fairly heavy traffic in both directions. The track at the point where the ties are laid is gravel ballasted, well drained, straight and practically level. Nearly all the treated ties are placed on a fill, but a few included in the test were laid in a cut.

Screw spikes with flat tie-plates were used on fifty per cent of the ties and the remaining fifty per cent, unprotected by tie-plates, were fastened by ordinary cut spikes. An extension to the original experiment included red oak and chestnut ties treated by a commercial plant, and a few spruce ties were used. In order to avoid disturbing the track in the future, new rails were laid at the time the ties were placed, and new fastenings were used throughout.

It is thought that a series of observations and inspections covering several years will yield valuable information relative to the preservation of timber and its behavior in actual use. The bulletin is illustrated with reproduction of drawings and photographs of apparatus and material.

Who Named Sassafras?

The makers of dictionaries as well as writers of books about trees seem unable to agree as to the origin of the name sassafras, which is applied, with certain variations, to a well-known tree with a range covering nearly half of the United States. It was formerly taken for granted that the name came from two Latin words meaning "rock-breaking." The supposed reason for the name was the well-known fact that sassafras roots grow in crevices of rocks which they pry apart. All trees do that to some extent, and sassafras is not peculiar in that respect.

The latest opinion of lexicographers is that the name is not of Latin origin and that the similarity between "saxifragus" and sassafras is purely accidental. That is the ground taken in Murray's new forty-five volume dictionary, where a large part of a page is given to the history of the word, as far as it is known. Murray believes that it is an Indian word, but is unable to educe positive proof of it. The earliest known use of the word by a European, in extant writings, was in 1571 by Monardes, a Spaniard. He thought the word was French, but it seems that the French first used it in Florida, and they must have adopted it from the Indians; but the Indian word which Monardes gave for sassafras was entirely different. Six years after Monardes wrote his book the word was used by an English writer named Frampton, who applied it to the sassafras tree in Florida. A strange coincident is found in the use of a very similar word for the same tree by the Narragansett Indians of Rhode Island. From New England to Florida the name for sassafras was practically the same when used by English, French, and Spanish, indicating that all must have gotten it from a common source; but the mystery is why Indians in Florida and in New England should have used the same word for the tree when their languages were totally different, and there was absolutely no communication between them.

Hardwood News Notes

MISCELLANEOUS

The Saginaw Wood Product Company will discontinue business at Saginaw, Mich.

The Joseph Peters Furniture Company, St. Louis, Mo., suffered a small loss by fire on June 14.

W. B. Jordan & Co. have been incorporated at Brooklyn. The company has $220,000 capital stock.

R. J. Colby has been appointed receiver for the Fox & Mason Furniture Company at Corunna, Mich.

The Hudson River Saw Mill Company has been incorporated with an authorized capital of $10,000.

The National Box & Barrel Company has been incorporated at Canton, O., with a capital stock of $25,000.

The Manchester Lumber Company was recently incorporated at Richmond, Va., with a capital of $100,000.

The Dana Guthrie Lumber Company has been organized at Charleston, W. Va., with a capital stock of $50,000.

The Riverside Lumber Company, Knoxville, Tenn., has been incorporated with a capital stock of $50,000.

The W. H. McGee Lumber Company started business at Elizabeth City, N. C. This company has $225,000 capital.

The Northern Michigan Lumber Company has been incorporated at Toledo, O., with a capital stock of $10,000.

Daniel B. Curll of Philadelphia, Pa., has changed the style of his concern to the D. B. Curll Lumber Company.

The A. E. Darling Lumber Company, Grand Rapids, Mich., has moved from Grand Rapids, Mich., to Big Rapids, Mich.

The Louisville Store Fixture Company and the H. Wolke & Bro. Furniture Company, both of Louisville, have been consolidated.

The Forked Deer Manufacturing Company, Trenton, Tenn., has sold its planing mill and lumber yard to the W. T. Ingram Lumber Company.

The Hale Lumber Company is the style of a new corporation starting business at Hickman, Ky. The company has a capital stock of $10,000.

The A. L. Kersher Furniture Company is the style of a newly incorporated company at Louisville, Ky. The company has a $1,500 capital.

The N. A. Curtis Manufacturing Company has started business at Columbus, O. This concern is capitalized at $15,000 and will manufacture show cases and similar articles.

The Doernbacher Manufacturing Company, manufacturer of furniture at Portland, Ore., will soon erect an additional factory building, office and sample structure at a cost of $20,000.

The Sterling Lumber Company of Clio, Ark., has increased its capital stock from $10,000 to $100,000. The principal stockholders are: B. J. Altheimer, J. H. Allen and W. J. Lockwood.

The Sterchi-Tillery-Rich Company is the style of a newly incorporated furniture manufacturing company which will operate at Wilmington, N. C. This company is capitalized at $25,000.

The Castle Hayne Stave Company has been incorporated under the laws of North Carolina to do a stave manufacturing business at Castle Hayne. The company has $100,000 capital stock.

H. A. Lightner, A. S. Guthrie, R. K. Ford, J. S. Dana and W. E. R. Byrne, all of Charleston, W. Va., have incorporated the Dana-Guthrie Lumber Company of that city, the capital stock being $50,000.

The Southern Pine Lumber Company at Diboll, Tex., has just completed the addition of a modern hardwood sawmill and hardwood flooring plant at that point. It is expected that this company will make a specialty of end-matched oak flooring.

The C. D. Burns Lumber Company of Martinsburg, W. Va., was recently incorporated with a capital stock of $50,000. C. D. Burns is president; C. E. Allen, vice-president and general manager, and J. C. Allen, chief accountant. The company is planning the erection of a fine new office at its yard and is also planning extensive improvements at the yard itself.

CHICAGO

C. E. Davis, sales manager of the Richland Parish Lumber Company, and the C. C. Mengel & Brother Company of Louisville, was in the city last week.

A. L. Arpin, of the Arpin Hardwood Lumber Company, Grand Rapids, Wis., spent several days last week calling on the trade.

H. F. Below, of the Vollmar & Below Company, Marshfield, Wis., made one of his frequent trips to the Chicago market a few days ago.

H. F. Arnemann, manager of the veneer department of the Hardwood Mills Lumber Company of Chicago, has just returned from an extended trip to Ohio, West Virginia and Virginia mill points. Mr. Arnemann spent the time looking over the plants of the various veneer concerns supplying him with stock.

C. B. Allen, manager of the veneer department of the Anderson-Tully Company of Memphis, Tenn., spent a week with the local trade a short time ago.

A. P. Steele, secretary and treasurer of the Carrier Lumber and Manufacturing Company, Sardis, Miss., stopped off at Chicago for a few days a short time ago.

J. H. Dion of Maisey & Dion, Chicago, gave an interesting talk before the Chicago Association of Commerce at its weekly meeting at the Hotel LaSalle on June 11. The meeting was given up to a review of the growth of various industries in Chicago, and Mr. Dion spoke for the lumbermen, reviewing the growth of this vast business since its beginning in 1834, when Captain Carver started a yard on the Chicago river.

C. E. Swanson of Chicago has entered an involuntary petition in bankruptcy.

G. C. Robson, sales manager of the Heinemann Lumber Company, Merrill, Wis., spent the greater part of last week calling on Chicago and surrounding trade.

J. T. McRoberts, secretary-treasurer of the Hooton Hardwood Company of St. Louis, spent last week with the local trade.

John A. Nourse of John A. Nourse & Co., prominent in the pine trade of Chicago, died at his home in Wilmette, Ill., last week.

C. W. Kendle, secretary of the Nicholson-Kendle Furniture Company of Huntington, W. Va., spent several days of last week in the Chicago market.

G. W. Sims of Proctor, Ark., a prominent hardwood manufacturer of that place, was in Chicago last week.

Haines Egbert, president of the Sanders & Egbert Company, Goshen, Ind., spent the latter part of last week with the local trade.

Major Edward C. Griggs of the St. Paul & Tacoma Lumber Company, Tacoma, Wash., was in the city for a few days the early part of last week, stopping en route from New York to the Pacific coast.

The National Lumber Manufacturers' Credit Corporation, whose headquarters are at St. Louis, Mo., publisher of the Blue Book, has opened a branch office of that publication in the Otis building, Chicago. A. C. Fish, who has had an extensive experience in credit work, has charge of the Chicago office.

NEW YORK

Secretary Perry has prepared for distribution to the members the usual handsome booklet covering the proceedings of the annual meeting of the National Wholesale Lumber Dealers' Association, held at Atlantic City last March.

L. Isaacsen who represents the Yellow Poplar Lumber Company, oak and poplar specialist of Coal Grove, O., is spending the summer at Belle Harbor, Long Island, and will conduct his business for the summer from that place.

The Hudson River Saw Mill Company is a new firm in the lumber trade of the Metropolitan district. The firm will conduct a retail and wholesale lumber and milling business and has leased a site at Edgewater on the Jersey shore opposite upper New York. Charles K. Buckley, C. K. Buckley Jr., and B. L. Stafford Jr. are principals in the new company.

Vicegerent Lewis is making a strenuous effort to round up the local cats for the concatenation at Coney Island, June 26. Indications are that there will be a good number of the members present to welcome the new kittens.

The hardwood and cabinet business of E. B. Jordan of Brooklyn has been incorporated as Edward B. Jordan & Co., capital $250,000. The incorporators are: Edward B. Jordan, Edward B. Jordan Jr. and A. B. Wilson.

The New York Lumber Trade Association held a regular meeting on June 11, at which time only routine matters were brought up.

BUFFALO

George B. Miller of Miller, Sturm & Miller has been spending several weeks in the Adirondacks recuperating after attending closely to business for a number of months with the new firm.

Manager H. L. Abbott of the Atlantic Lumber Company has taken a part of the Scatcherd & Son yard, where he will have much needed space for the carrying of lumber stocks.

H. A. Stewart was in Pennsylvania the early part of this month and while there shipped out a quantity of hardwoods, principally cherry, in which trade is reported to be fair.

Angus McLean, formerly a Buffalo lumberman, spent part of the month in the city and called on some of the members of the hardwood trade while here.

James M. Briggs & Co. will soon start sawing hardwoods as well as hemlock at Protection, N. Y., where they recently purchased a timber tract and a sawmill.

President George A. Corson of the A. A. Engle Lumber Company has been spending several weeks at the company's tracts at Harriman and New River, Tenn. He reports the weather there as rather unfavorable for lumbering.

The Standard Hardwood Lumber Company reports a fair demand for lumber this month, but expects to see larger sales in the furniture trade after the summer conventions are over.

Blakeslee, Perrin & Darling are receiving hardwood stocks in a number of lines this month, principally in oak. Local trade is reported to have been quiet on account of the teamsters' strike.

PHILADELPHIA

The Lumbermen's Exchange held its regular monthly meeting on June 5, with William H. Fritz, vice-president, in the chair. Only routine business was transacted and the meeting adjourned until September 6.

A large body of retail and wholesale lumbermen met at Griffith Hall,

June 16, to protest against a bill to repeal the Mechanics' Lien Law, which recently passed the senate at Harrisburg.

The Floyd Lumber Company was incorporated under Pennsylvania laws June 12, succeeding the Floyd-Olmstead Company. The capitalization is $25,000. The officers are Raymond L. Peck, president; John W. Floyd, treasurer, and Charles A. McClure, secretary. Mr. Floyd has just returned from the Carolinas, where he has made some desirable connections.

The carriage factory of Edward Edgerly, Lancaster, Pa., was destroyed by fire June 12, with a loss estimated at $50,000.

F. X. Diebold, president of the Forest Lumber Company, has been spending much of his time at the mill at Konnarock, Va. He says mills are kept busy getting out orders, but confesses to a lack of snap in trading of late. Notwithstanding this he is optimistic as to the outlook.

James Strong & Co. greatly surprised their many friends recently by quietly going out of business. Charles F. Fry, manager, has associated himself with the Guenther Lumber Company, and Mr. Strong has gone with the Pennsylvania company.

As Beecher & Barr have decided to give up their Philadelphia offices, all communications will hereafter be carried on with the main office at Pottsville, Pa. George G. Barr will continue to look after his New York, Boston, Baltimore and Washington trade, and H. S. Bond will handle the Philadelphia business from his residence, 527 East Tulpehocken street. The Philadelphia office will continue open until July 1.

John J. Rumbarger of John J. Rumbarger Lumber Company admits a lack of what he spicily terms "ginger" in trading at this time, but the totality of sales so far this year, he says, has been very satisfactory.

R. Wyatt Wistar of Wistar, Underhill & Nixon, says business continues steady and there are no visible signs anywhere of a disturbing business shrinkage in the future. The rebuilding of the mills at Sumter, S. C., which were destroyed by fire recently, is being rushed. The small mill is already up and the large one under way.

Howes & Russell have moved temporarily to 608 Crozer building but will transfer office later to the mill of the Birch River Lumber Company of Birch River, Va., which is owned by this firm. Henry T. Russell is at the plant superintending the work.

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All Kinds of High-Grade

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S. E. SLAYMAKER & CO.

Representing WEST VIRGINIA SPRUCE LUMBER CO., Cass, West Virginia.

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Hardwood Manufacturers and Jobbers

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HIGH GRADES IN SOUTHERN HARDWOODS A SPECIALTY

E. C. BRADLEY LUMBER CO.
HIGH GRADE WEST VIRGINA HARDWOODS
GOERKE BUILDING

BOSTON

The Lumber Dealers' Association of Rhode Island held its regular summer outing on June 7 at the Ponham Club, which is located on the Providence river. It was largely attended. Luncheon was served from 11:30 to 1, which was followed by a ball game. In the evening the annual dinner was served, and after a short address by Forrest J. Perkins, president of the association, a gold match safe was presented to Nelson H. Wolcott, president of the National Wholesale Lumber Dealers' Association.

The Massachusetts Forestry Association held a field day early in the month at the Harvard Forestry School, Petersham, Mass.

The building contracts awarded in New England since January 1 amounted to $75,510,000, as compared with $88,503,000 for the corresponding period of 1912 and $73,844,000 for the corresponding period of 1911.

Isam Mitchell & Co., Inc., has been incorporated at Brockton, Mass., with a capital stock of $100,000. The incorporators are Isam Mitchell, Grace E. Baker and George M. Hart.

The Chapin, Morse & Buffum Company, Springfield, Mass., has been incorporated with a capital stock of $50,000, for the purpose of carrying on a lumber business. The incorporators are: George D. Chapin, William C. Morse and Frederick H. Buffum.

BALTIMORE

Under a ruling issued recently by the Interstate Commerce Commission at Washington, the rates on lumber from mills in Florida, Georgia and Alabama to Baltimore and Washington may be increased from one to four cents. The increase was really decided upon in August, 1912. At that time the shippers protested and prevailed upon the Interstate Commerce Commission to issue an order suspending the advance until an investigation could be made. This has now been done, and as a result the commission announces that the increase desired by the railroads is not "unjust, unreasonable or discriminatory," as was contended by the shippers.

The suburban home of Robert McLean, a hardwood exporter whose affairs were placed into the hands of receivers some three months ago, was sold at auction June 16. Mr. McLean is now in Scotland.

The band mill owned by the United States Coal and Oil Company at Holden, W. Va., was destroyed by fire on June 11, the loss being put at not less than $30,000.

Among the visiting lumbermen here during the last week or ten days was G. C. Burkholder, representing the J. W. Turnbull Lumber Company of Philadelphia. Mr. Burkholder stated that business kept up fairly well and that prices had shown no weakening thus far.

Water Engineer Whitman and City Forester Maxwell plan to plant not less than 30,000 hardwood trees on the land surrounding the new reservoir on the Gunpowder river valley as a means of protecting the watershed from contamination. The whole watershed along the Gunpowder is to be reforested, and it is also the intention of the city to establish a nursery along the watershed, from which trees will be sold to all persons who desire to park their sidewalks in the city.

COLUMBUS

C. W. Needham, formerly head of the Needham Publicity Bureau here, has joined the sales force of the Sowers-Leach Lumber Company. The business of this company has experienced large gains during the last year, and additional territory is being covered by the wholesale department of the business.

A meeting of the stockholders of the Waterford Panel & Veneer Company has been called for June 28 at Waterford, O., for the purpose of dissolving the company and surrendering the charter.

Columbus is experiencing a boom in real estate building, according to the reports of material men, and it is said that the present activity is greater than at any time during the last ten years. Industrial prosperity here is given as the cause of this large construction business, which is of big proportions in all sections of the city. Labor demand has resulted

in an inquiry for rental property considerably in excess of that available, and builders are striving to meet the requirements.

The firm of H. H. Geisy & Bros., which suffered severely by the recent flood, has repaired about all the damage and is doing business at the same location.

W. B. Sissons, sales manager for the Sowers-Leach Lumber Company, says there is a good demand for hardwoods, with prices holding up well. He looks for a better market in the future. The company recently employed C. S. Lucas, formerly connected with the Adelman Company of Pittsburgh, as traveling representative in northwestern Ohio.

W. M. Ritter of the W. M. Ritter Lumber Company has returned from an inspection trip among the mills in the South.

Curtiss Ritter, salesman for the W. M. Ritter Lumber Company in western Pennsylvania, has returned to his territory after several weeks illness.

INDIANAPOLIS

A $5,000 loss by fire was suffered a few days ago by the Hoosier Hoop Company, Marion, Ind.

Swings will be manufactured at Huntington by the newly organized Skidoo Swing Company which has been incorporated with an authorized capitalization of $25,000.

The Eaglesfield-Stewart Company, manufacturer of parquetry and hardwood flooring, which recently occupied a new plant, has sold its old plant to Dr. John F. Barnhill for $24,000.

A large timber tract near Danville, Ill., known as the Makesom Woods, has been bought by the Sanders & Egbert Company, which has veneer mills at Goshen and South Bend. There are about 1,000 walnut trees and about 2,000 oak and hickory trees in the tract. The purchase price was about $85,000.

C. C. Stewart, H. T. Jordon and A. T. Stewart have organized and incorporated the Laporte Molding and Cabinet Company at Laporte to manufacture moldings and do cabinet work. The company is capitalized at $20,000.

William W. Waltman of the Indiana State Board of Forestry died at his home in Brown County, June 15, after a short illness. A few days before Mr. Waltman's death Governor Ralston reorganized the forestry board, reappointing Mr. Waltman and Prof. Stanley A. Coulter of Purdue University and appointing Will A. Guthrie, nominated by the Indiana Hardwood Association and C. D. Meeker, president of the Indiana Retail Lumbermen's Association. Elijah H. Gladden of Lexington will succeed Charles C. Deam of Bluffton, state forester, on July 1. The vacancy caused by Mr. Waltman's death has not been filled.

MEMPHIS

The weather throughout this territory recently has been very favorable for logging operations and these have made good progress. There has been practically no rainfall and the woods are unusually dry even for this time of the year. There is a good demand for logs, owing to the splendid trade conditions obtaining with respect to hardwood lumber and this is proving a further incentive to active logging work. Most manufacturers here believe that there is a good business ahead and there is a decided disposition on their part to get out sufficient timber to take care of their needs. The fact that stocks are broken in some directions is also something of a stimulus.

The Valley Log Loading Company is loading logs on a liberal scale for Memphis and other points on the Yazoo & Mississippi Valley line of the Illinois Central. It has also just resumed loading on the Memphis-Marianna cut-off of the St. Louis, Iron Mountain & Southern which has been reopened for traffic during the past few days. This road taps a section which is unusually rich in timber resources. A number of firms at Memphis own timberland holdings in that territory. The Valley Log Loading Company loads on the Yazoo & Mississippi Valley line and this road exclusively. Operations have been suspended on the latter for more than two months. Timber is being gotten out rapidly, however, and the officials of the company say that they are expecting a large movement of timber over that line in the near future.

While it is not known on what site the band mill and veneer plant of R. J. Darnell, Inc., will be located, it is definitely understood that plans will be launched at once for the rebuilding of both. Details will be found elsewhere in this issue regarding the burning of the double band mill and the veneer machines of this firm on June 15. R. J. Darnell, Inc., owns two other mills at Leland, Miss., and orders received at Memphis will be filled as far as possible from the other plants, pending the rebuilding of the mill at Memphis. This firm also owns the Batesville & Southwestern, which is nearly completed between Batesville, Miss., and Charleston, Miss., and has a considerable amount of timberland in that section to be developed through the aid of this road. A large amount of logs had already been prepared for delivery to the mills at Memphis but the timber will be diverted to the mills at Leland. The latter will be operated on fuller schedules as a result of the burning of the plant at Memphis in order that the business of the firm may be taken care of with greater promptness.

The Illinois Central has announced plans here for the building of the largest roundhouse in the South and for the double tracking of the Yazoo & Mississippi Valley from Memphis to Lake Cormorant. It has also announced that there will be a very decided increase in the facilities of the Nonconnah yards south of this city. These improvements will involve a total of approximately $700,000. The enlargement of the terminal facilities of the Illinois Central and the building of the roundhouse, together with the double tracking of the Yazoo & Mississippi Valley, will greatly facilitate the handling of traffic over the Illinois Central system. This is a matter of vital importance to lumber interests here, particularly to those manufacturers who have their timber on either line of this system and to the exporters who send the greater portion of their shipments to Europe over either the main line or the Yazoo & Mississippi Valley. There has been more or less serious congestion during the fall and winter for several years and lumbermen believe that the improvements now under way will result in a much more satisfactory service than has been experienced heretofore.

The Sullivan Wood Treatment Company, capitalized at $50,000, has made application for a charter. Headquarters will be maintained at

Kentucky Lumber Company
MANUFACTURERS
POPLAR, PLAIN AND QUARTERED OAK, RED AND SAP GUM, ASH, CHESTNUT, BASSWOOD, HEMLOCK, WHITE PINE
Mills at
Burnside, Ky. Williamsburg, Ky.
Isola, Miss.
Sales Office
Cincinnati, O.

CINCINNATI
Hardwood Manufacturers and Jobbers

RIEMEIER LUMBER CO.
OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

SHAWNEE LUMBER CO.
HARDWOODS, WHITE PINE and HEMLOCK
Sales Office—South Side Station—C. H. & D. R. R.

JAMES KENNEDY & CO., Ltd.
OAK, POPLAR AND OTHER HARDWOODS
FIRST NATIONAL BANK BUILDING

The Kosse, Shoe & Schleyer Co.
WALNUT, OAK, AND OTHER HARDWOODS
103-4-5 CAREW BUILDING

OHIO VENEER COMPANY
Manufacturers & Importers FOREIGN VENEERS
2624-34 COLERAIN AVENUE

CHARLES F. SHIELS & CO.
SPECIALISTS IN WIDE STOCK
POPLAR, OAK, CHERRY, BIRCH

GEORGE LITTLEFORD
RED CEDAR, CHERRY
OFFICE: 1263 RICHMOND STREET

SWANN-DAY LUMBER CO.
Mfrs. YELLOW POPLAR and WHITE OAK
SALES OFFICE—SECOND NATIONAL BANK BUILDING

Memphis. J. P. Sullivan and J. O. Sims are among the principal incorporators. The firm will use a chemical and electrical process for removing sap-stains from lumber and for treating newly sawn lumber in such a way as to prevent it from sap-staining. The process has been demonstrated to a number of prominent members of the hardwood trade here to their entire satisfaction and the outlook is regarded as favorable for the new enterprise.

The J. V. Stimson Hardwood Company, Inc., has been authorized to do business under the laws of Arkansas. It states in its application that it will have about $10,000 of its capital stock invested in that state. Headquarters will be maintained at Wabash and A. M. Horton is named as agent for service. This firm has recently greatly enlarged the scope of its operations, having purchased the band mill and veneer plant of C. L. Willey in north Memphis some time ago.

J. T. Willingham, president of the Memphis Coffin Company, was elected president of the Tennessee Manufacturers' Association at the recent annual in this city. Two other prominent Memphis lumbermen were honored at the same time. S. B. Anderson, head of the Anderson-Tully Company, was chosen first vice-president and T. R. Winfield, president of the Cole Manufacturing Company, was elected treasurer. Mr. Anderson is president of the Memphis Manufacturers' Association, which is allied with the Tennessee Manufacturers' Association. T. F. Bonner of Nashville was elected second vice-president and G. L. Hardwick, Cleveland, third vice-president. The meeting was an unusually successful one. The principal topics of discussion were more favorable laws regarding taxation, with particular reference to back taxes, and legislation looking to fairer compensation for workmen employed by members of the association.

Wright H. Smith, vice-president and general manager of the Jonesboro, Lake City & Eastern railroad has recently tendered his resignation, and will go into business on his own account. He has been succeeded by J. Burns of St. Louis. The controlling interest in the Jonesboro, Lake City & Eastern is owned by Lee Wilson, of Lee Wilson & Co., lumber manufacturers, and, prior to his acceptance of the position of vice-president and general manager of this road, Mr. Smith was in direct charge of the lumber operations of this firm.

Building operations since the first of June have been on a pretty liberal scale. One permit has been taken out calling for $450,000, or considerably more than the total involved in building operations during May. This is for the Illinois Central passenger station. A number of building operations have been launched during this month and indications are that there will be an unusually good showing. In the meantime the demand for building materials of all kinds is on the increase. Operators of sawmills, planing mills and other plants for the manufacture of building material are having their hands quite full taking care of the business now offering.

The Kelley Lumber Company of Searcy, Ark., has secured a lease on a mill site at Wheatley, Ark., the junction point of the Rock Island and the Missouri & North Arkansas railroads. In addition to securing this site on which a mill will be erected at once, the company has also secured control of several million feet of timber in that section.

The Big Bayou Lumber Company, Pine Bluff, Ark., has filed articles of incorporation and will establish a mill at Reydel, Jefferson county. The capital stock is $10,000 and Henry Kruse is one of the principal stockholders. He has already been elected to the presidency of the company.

The Searcy Spoke & Felloe Company has filed articles of incorporation under the laws of Arkansas. S. H. Wright, E. A. Ford and others are the incorporators. The capital stock is $10,000.

NASHVILLE

The Nashville Hardwood Flooring Company has established a new record in the manufacture of hardwood flooring, turning out 514,261 feet last week. Officers of the company promised about 300 employes a big banquet if they would make a record of half a million feet of flooring in one week, and they went after the mark and passed it. The banquet was given at the Commercial Club Tuesday night, and was a most enjoyable affair. A. B. Ransom, president of the company, presided as toastmaster, giving all present a warm word of welcome and praise for the new record established by the company. The Nashville Hardwood Flooring Company claims to be the biggest concern of the kind in the world, and its record last week is probably a world record for one company. The flooring trade has been very active of late, and the rush of business caused the company to make this offer to the employes.

Local manufacturers are at work making plans to have a permanent exhibit of Nashville manufactures. An option has been secured on a large building on Second avenue, in the central part of the city. Enough manufacturers have contracted for space to practically assure the success of the movement. The Nashville Lumbermen's Club has agreed to take space for a general lumber exhibit.

The Tennessee Realty Company of Chattanooga, with an authorized capital stock of $150,000, has been granted a charter by the secretary of state. The purpose is to develop timber and mineral lands. C. C. Moore, O. P. Darwin, J. H. McCallum, R. Frank and G. Loeffler are incorporators.

The Tennessee Oak Flooring Company has recently installed a thirty-ton ice plant at its establishment for the purpose of utilizing power. If the undertaking proves successful it is probable that the output will be increased to sixty tons daily.

The Nashville Traffic Bureau has filed a petition with the Tennessee Railroad Commission asking for a reduction of rates on crossties shipped from Tennessee, and that rates be granted conforming to rates on lumber. The Louisville & Nashville railroad is the principal line concerned. Great discrimination is claimed on cross ties.

BRISTOL

It is reported that the R. E. Wood Lumber Company of Baltimore has purchased a large tract of timber south of Bristol and will at once install a mill at Earhart's, seven miles south of this city on the line of the Virginia & Southwestern. The company has purchased one of the best small tracts of timber in this section and will put in a band mill. Superintendent Bledsoe is already on the ground getting ready to start work. The company is also operating in North Carolina.

The H. F. Wyman Lumber Company of this city has just started its new mill at Johnson's Mill, Lee county, Virginia. The company is operating on a large scale in that section.

Fred K. Paxton of the Paxton Lumber Company, and T. W. Lewis of this city have organized the Lewis Lumber Company, with a capital stock of $25,000. The company will operate a mill at Allbright, W. Va., with a daily capacity of 25,000 feet. It has a good sized area of timber in that section.

J. W. Bonham is cutting a large amount of export oak near Bristol, which he is hauling to this city on gigantic motor driven trucks. Several other manufacturers are also hauling their lumber to Bristol on these cars and find it not only a much more rapid way to handle it, but considerably cheaper than with teams.

LOUISVILLE

The Lanham Hardwood Flooring Company, which has a modern factory at Twelfth and Magnolia streets, is now erecting a flooring warehouse that will be a model of its kind. Moisture-proof brick is being used, the walls being provided with an air chamber, while the concrete

The Tegge Lumber Co.
High Grade
Northern and Southern
Hardwoods and Mahogany
Specialties
OAK, MAPLE, CYPRESS, POPLAR
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MANUFACTURERS
WEST VIRGINIA HARDWOODS
Soft White Pine, Oak, Poplar, Chestnut, Hemlock
Band Sawed Stock
MILL FACILITIES COMPLETE PLANING
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AT HALF PRICE
STEAM SKIDDER
AND LOADER COMBINED
Clyde Modern Equipment. Used about sixty days. Operations discontinued. No further use for it
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floor will cover a substratum of cinders, in addition to which a special drain will be provided. The building will be heated in cold weather with a hot blast air system. It will be large enough to hold about 500,000 feet of flooring. P. B. Lanham, president of the company, is a hustler and has made his concern one of the leaders in that line in this part of the country.

The Mengel Box Company has acquired an entire city block south of its factory at Twelfth and Ormsby streets, and is constructing a modern yard there. It will handle lumber used in the factory, and also will be used as a yard for the surplus stocks of the sawmills at Hickman, Ky., and Mengelwood, Tenn. This will be especially useful in reducing the damage from floods, as it is the plan to ship lumber from those points to the Louisville yard when there is any danger from high water.

The Louisville Hardwood Club has decided to file a complaint with the Interstate Commerce Commission against the tariff recently filed by the Louisville & Nashville railroad, effective June 7, in which rates on lumber from Alabama and Tennessee points to Louisville are increased. The tariff was understood to be simply a revision to accord with a recent ruling of the commission, and no attention was given it when it was filed in May. It is believed that it can be canceled and reparation secured on overcharges. The W. P. Brown & Sons Lumber Company has been leading the fight against the increased rates. The Lumbermen's Bureau at Washington will handle the case.

R. F. Smith of the Ohio River Sawmill Company read a paper at a recent meeting of the Louisville Hardwood Club, dealing with the outlook for business. He analyzed present trade and industrial conditions, referred to the relative sizes of stocks now and a few months ago, and drew some interesting conclusions as to the future of the trade. Mr. Smith's paper was one of a series of addresses on business topics arranged by the club some time ago.

A real old-fashioned summer has hit Louisville, and the lumbermen are seeking cooler spots. The Hardwood Club held its meeting June 24 at Eight-Mile House, a tavern near Louisville, which is famed for its chicken dinners. Most of the meetings in the next month or two will probably be held at outdoor resorts, which are particularly attractive at this time of the year.

Considerable disappointment was felt when the Interstate Commerce Commission decided to postpone for several months a hearing of the complaint of the board of trade of Louisville against the Louisville & Nashville railroad, in which the regulations of the road regarding switching are involved. The commission set the date as June 20, but before it was held it announced that other cases had precedence, and that the switching matter would come up in the fall.

Much interest was felt in Kentucky in the recent decision of the Supreme court on the right of state railroad commissions to fix rates which may affect interstate rates, inasmuch as the constitutionality of the McChord act, giving the Kentucky commission that power, is now before the same tribunal. It is expected, in view of the precedent that has been set, that the court will decide that the state commission can regulate rates without regard to the result on interstate charges. The commission has been greatly handicapped in relieving the difficulties of shippers because of a question as to this point.

The Elkhorn Fuel Company, which is starting mining development in eastern Kentucky on a large scale, has announced that it will build two large band mills, the purpose of which will be to manufacture material for use in construction work. Meanwhile it has been buying a large amount of lumber.

The Lucas Land & Lumber Company of Paducah, Ky., which is in the hands of Receiver Muscoe Burnett, is making a fine showing under this official, who has applied for permission to borrow $100,000 to enable operations to be continued. The total liabilities of the company are placed at $224,174, with assets aggregating $530,680, so that it seems that it can easily be put back on a prosperous basis.

Day Brothers of Winchester have announced the sale of their holdings in eastern Kentucky to a New York syndicate at a figure reported to be in excess of $1,000,000. The sale involved their timber and coal lands, sawmills, stores, etc., besides a narrow gauge railroad running from Campton to Campton Junction. They retain an interest in the new company and will have the active management of the property.

The Rim Club, composed of vehicle stock manufacturers of the country, which met recently in Louisville, has announced that another session will be held in Chicago in July. The club has been having quarterly meetings, but will meet more frequently hereafter.

The American Creosoting Company, which has its general offices in Louisville, is now constructing a new plant at Indianapolis for the treatment of ties and other timbers. The plant was put up as the result of the award of a big contract by the Big Four railroad to the company. The cost will be about $150,000. It has just completed a plant in Canada.

ARKANSAS

The Arkansas Association of Lumber Dealers held its ninth annual convention in the Marion hotel at Little Rock on June 9 and 10, with the largest attendance of retailers the organization has ever had at a convention. There were also present at the meeting many manufacturers of lumber and allied lines.

The Gap Lumber & Stave Company of Caddo Gap has recently increased its capital stock from $20,000 to $30,000.

The Murfreesboro Lumber Company of Murfreesboro, Ark., has recently sold its planing mill and box factory to Joe Kirby of Wichita Falls, Tex., and E. J. Bickley of Texarkana, Ark. A stock company is being organized and the new owners are preparing to enlarge the plant.

The Archer Lumber Company of Helena, Ark., is erecting a new hardwood sawmill plant. The company has recently purchased a large tract of timber, consisting principally of hardwood, in the vicinity of Mellwood, Phillips county, Arkansas.

MILWAUKEE

At the meeting of the Western Cigar Box Manufacturers' Association in the Blatz hotel last week no action was taken by the convention outside of the election of officers and the regular business. C. F. Koklauner, Cedarburg, was elected president; A. G. Wiedmann, Kansas City, first vice-president; J. P. Van Vick, Duluth, second vice-president; S. G. J. Kingston, London, Ontario, third vice-president; E. H. Defebaugh, Chicago, secretary-treasurer; F. H. Parker, Milwaukee, member of executive board; J. Schwartzburg, Milwaukee, member of board of directors.

Earl Pence of Burlington, who has been connected with the Badger Basket & Veneer Company of that city for the past two years, has applied for a patent on a new collapsible wash stool. Negotiations with Racine capitalists for the purpose of securing the manufacturing rights are under way.

The Wood County Cooperage Company at Grand Rapids, Wis., has been incorporated to manufacture cranberry barrels and butter tubs for the local trade. The old Graither plant on High street has been leased. Next year it is planned to install up-to-date machinery and increase the line of goods. The capital of the company has been placed at $20,000, and the officers are Jacob Searls, president, and George W. Paulus, secretary-treasurer. The other incorporators are J. Bissig, A. E. Bonnet and E. P. Arpin.

The Mohr Lumber Company has been incorporated at Wausau with a capital stock of $200,000. It will operate the former Fred Schubring sawmill. C. F. Mohr, Fred Schubring, George S. Griffith and D. Danielson are the incorporators.

Henry L. Meyer, Elmer E. Meyer, Joseph P. Klassen and George F.

MEMPHIS

VANDEN BOOM-STINSON LUMBER COMPANY
Manufacturers Southern Hardwoods
Quartered Oak a Specialty
Memphis Tennessee

TIMBER ESTIMATES
REPORTS INCLUDED
TOPOGRAPHICAL MAP, DETAIL ESTIMATES & WRITTEN REPORT
GARDNER & HOWE
ENGINEERS
Clarence W. Griffith Department Manager, Porter Building. Memphis, Tenn.

The Mossman Lumber Co., Inc.
Manufacturers
plain and quartered red and white oak, ash, gum and poplar.
ALSO FULLY EQUIPT DIMENSION PLANT
Memphis, - - Tenn.

THE Kraetzer Preparator

¶ A wood steaming cylinder, the use of which insures the quick drying of all kinds of Lumber without seasoning defects, stain or warp, to less than normal weight and with a minimum shrinkage.

¶ Operating cost much less than yarding practice.

¶ Can be employed with or without a dry-kiln.

¶ Lumber from the saw can be air-dried in from ten to forty days; kiln-dried in from one to six days.

¶ A new Kraetzer Preparator is being installed every week by some of the foremost and most astute lumbermen in the country.

¶ The demand for Kraetzer-Cured Lumber, owing to its superior quality, is in such excess of supply that it commands a handsome premium.

¶ While we know "new ideas hurt some minds as new shoes hurt some feet," will you not investigate?

¶ Complete information for the asking.

THE KRAETZER COMPANY

537 South Dearborn Street

CHICAGO

THE Kraetzer Preparator

Kasper, Sherwood, have incorporated as the Sherwood Lumber Company with a capital stock of $10,000.

The Taylor County Lumber Company has been incorporated at Rib Lake by P. E. Marcus, Charles Miller and Leo Miller with a capital stock of $10,000.

The J. Fountain Lumber Company of Appleton has increased its capital stock from $20,000 to $50,000.

Machinery for manufacturing several kinds of baskets will be installed in the plant of the Wisconsin Wood Working Company at Two Rivers. The veneer for the baskets will be cut on the lower floor of the plant and the two upper floors devoted to the basket-making department. Manager Conant has had considerable experience in this line.

The Northwood Furniture Company of Chippewa Falls has installed new and improved machinery in its plant, which will increase its output materially. A varnish machine of the latest type, using compressed air, will enable one operator to do the work of several men and save on the varnish. The double-end tender in the machine room is another improvement. M. Jay Pozanski is manager.

The Moore and Galloway Lumber Company of Fond du Lac has begun an important addition to its plant on West McWilliams street. The new building is to be a two-story building, 36 feet wide and about 250 feet long. A portion, 36 by 42 feet, will be used as a glazing room and the remainder as a warehouse. The first portion will be brick and concrete and the remainder of mill construction.

A bill has been passed by the legislature and signed by Governor McGovern which authorizes the city of Milwaukee to designate certain sections of the city as factory or business districts. The twin bills, introduced by Assemblyman Estabrook, also provide for authorizing the city to set apart certain sections to be known as residence districts.

J. L. Davis of Philipps, who has been associated with the Gillette-O'Leary Lumber Company of Ladysmith for the past year, has sold his interest in that firm to F. E. Gillette. Mr. Davis has fitted up offices in the Kneeland-McLurg Lumber Company's building in Philipps and has gone into the wholesale and commission lumber business. Mr. Davis was formerly salesman for the John R. Davis Company of Phillips.

Louis Foster, aged forty-nine, son of the late George H. Foster, founder of the Foster Lumber Company, died at his home, 764 Mineral street, June 19, after a prolonged illness. Mr. Foster was connected with the Foster Lumber Company and for a number of years had been in charge of the south side branch. Besides his widow, he is survived by his mother and two sisters.

William Holmes, aged eighty-three, a millionaire lumberman of Menominee, died recently. He was born in Miramichi province, N. B., in 1830. In 1853 he came to the upper peninsula, where for thirty-eight years he engaged in logging with the late Samuel Stephenson. He was superintendent of the Kirby-Carpenter logging operations. In 1897 he built a logging railroad seventy-five miles long. He was prominent in various business enterprises in Menominee. His wife, four sons and one daughter survive him.

Senator Isaac Stephenson, the well-known Marinette lumberman, celebrated the anniversary of his eighty-fourth birthday on June 18. Mr. Stephenson came from Washington, D. C., to spend the day with his family at Marinette.

Donald W. Connor, in charge of the hardwood sales department of the R. Connor Company of Marshfield and assistant in the management of that business, was killed at Fremont, Wis., when the automobile he was driving skidded and turned over, pinning him beneath and causing his death forty-five minutes later. He was the son of former Lieut.-Gov. Connor.

The Hardwood Market

CHICAGO

The most conspicuous feature of the Chicago trade right now is the labor controversy between the local labor unions and the Building Construction Employers' Association. This controversy started, it is claimed, because in a certain large building in Chicago the electricians' union insisted upon the contractors employing high-priced emergency men who were paid big wages for merely sitting around and waiting for some emergency to turn up which would require their services. It was maintained by the builders that the regular electricians could take care of these emergencies just as well and they discharged the extra help. This resulted in a strike on the part of the unionists in that building, which spread to other buildings and as a retaliatory measure the employers unanimously declared for a lockout in all buildings in Cook county. As a result all big work is tightly tied up and there is no immediate prospect of a settlement. It has been predicted that the matter of adjustment would either come speedily or the matter would be strung out for an indefinite period. At present there does not seem to be very much disposition on the part of the builders to take back their men, and the situation is really serious as far as building, and, consequently, as far as the lumber trade is concerned.

In addition, the usual hot weather dullness is very apparent locally, and there is some little talk of sales below market both on building lum-

ber and on hardwoods. This has been apparent for some little time, but has not assumed any serious proportions. It is the result of the advent of the usual laxity in demand at this time, together with the still apparent effect of recent big transit shipments on account of the flood menace, and receipt of considerable shipments of northern stock by water. No great uneasiness, however, is felt locally and it is confidently predicted that the present situation, while it will probably continue for some little time, will be definitely righted towards the end of July, at which time a resumption of very active business is anticipated.

NEW YORK

The hardwood market in general is showing less than normal activity and with but few exceptions prices are firm. Wide No. 1 panel poplar has been very slow of late. A number of mills have been cutting four-inch, with the result that the price for this stock has eased off quite a little. On the other hand, it is noted that No. 1 common red and sap birch has been advanced $2 and $1, respectively, and the remainder of the list shows no reduction in prices. Oak is still in very good call and it will probably continue so for a long time to come. Ash, basswood, chestnut and maple in the better grades are in fair call. The fancy woods continue strong in demand and the supply short. The yard and manufacturing trades are not carrying any great amount of stock but it is not expected that buyers will come into the market for large supplies until after the warm weather. In the meantime it is expected that the demand for current needs will absorb the ready supplies.

The hardwood flooring market is fairly active. Competition has been pretty keen in this market but the large handlers are all holding firm on prices and show no disposition to break the market simply to make sales.

BUFFALO

The hardwood yards have been doing a fair amount of business lately, but their local sales have been much interfered with by a strike among teamsters. June business, therefore, will not show up so well as it otherwise would. Buyers generally have been taking hardwoods only for immediate use. Yard prices have been holding up well. The demand for common oak has not been quite so strong at some yards as it was a short time ago. Flooring in various hardwoods continues strong and in relatively good demand. Brown ash has been one of the most active woods. Lake supplies have begun to come in to some extent, a number of large hardwood cargoes being reported.

PHILADELPHIA

The hardwood situation remains practically unchanged from a fortnight ago. Market reports vary according to the capacity of the handlers of these woods, for naturally the man who can supply the desired stock is the one who gets the orders. The slight decline from a sharp activity is to be expected as the warm weather approaches, but a dependable undercurrent of strength in the situation augurs a continued firmness of the market. The prolonged tariff agitation naturally affects the box employing industries to some extent, but it is the opinion of the close observer that it is not responsible for half of the ills laid at its door. The consuming industries continue fairly busy, and the railroad companies are planning for increased extension work and equipment. Stocks at the mill end are none too heavy, and the first rush for goods will clean up the bulk of desirable woods, consequently prices hold firm. On the whole the present state of the hardwood market is far from causing uneasiness of any kind.

The position of the woods is but little changed. Plain and quartered oak is the leader; ash is in good demand; birch is active; cherry, basswood and beech hold good place; high-grade chestnut is steady, and sound wormy firm. There is no weakening in mahogany and veneer; low grades of all hardwoods are scarce and prices well sustained.

BOSTON

Taking the demand for hardwood lumber as a whole in Boston and vicinity during the past two or three weeks, it cannot be termed active but, on the other hand, quite attractive features have developed in the market. The call for some grades of lumber is much more active than for others, but prices throughout the list are firmly maintained and practically all reports from manufacturers of hardwood lumber indicate the tendency upon their part to hold for full asking prices rather than to try to force sales and in that way sacrifice profits. There has been a very good demand for veneers, and manufacturers making such stock have been able to keep their plants running practically full. Furniture manufacturers are busy and piano makers in this section have had a good season.

The demand for plain oak in one inch, one's and two's, is perhaps the strongest feature in this market. Offerings are small and prices are well held. There is also a strong demand for quartered oak in thicknesses of ½, ⅝ and ¾ inches. Ash is also in good demand and dealers here state that they have a call for all grades, including culls. Ash is in small offering, due in part to the strong demand reported in the West.

BALTIMORE

There is little change in the movement of hardwoods in this market. Every now and then indications of an easing off in the inquiry is reported, but this has been so far always succeeded by a restoration

Quartered Oak Veneer

¶ Our stock is sawed or sliced from genuine Forked-leaf White Oak.

¶ If you call you won't leave without buying as we have the right figure for the most exacting requirements.

¶ Our perfect machinery and supervision make perfect manufacture.

Call or write now and have a good choice

Fred W. Black Lumber Company
Chicago

Take Douglas Park "L" to 40th Ave. and walk one block south

Timber Grows In Value

Steadily, persistently, consistently.

Here are the reasons:

DEMAND increases with the increase in population and in time becomes competitive in character.

SUPPLY becomes less each year almost to the extent of the annual cut.

INTENSIVE USE. Kinds and qualities of timber now regarded as valueless will be marketable in a few years. Estimates now regarded as fairly exact will be made valueless in a few years within which time more of the timber will enter the "merchantable" class.

These are not ARGUMENTS; they are FACTS. Take them into account before deciding on your next investment.

James D. Lacey & Co.

Timber Land Factors

Chicago, Ill., 1750 McCormick Building
Portland, Ore., 1104 Spaulding Building
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of the previous conditions, and at the present time, according to the information available, the calls for stocks are about as free as they have been at any time during the current year, while the range of prices is virtually the same. Manufacturers of hardwoods state that they are still finding takers of lumber in sufficient quantities to dispose of their available supplies. This applies to practically all kinds of stocks, poplar as well as oak, ash, chestnut and other woods being in good request at figures that afford a fair margin of profit. Some of the handlers of hardwoods here even state that the volume of their business is going ahead, and that the present year is the largest in their experience. Yards, which, for a time, seemed to have obtained all of the lumber they felt would be needed, and which held back in the matter of placing orders, are again taking up desirable lots. This movement enables the manufacturers to keep a fairly "clean slate," with chestnut as one of the woods in active request at prices that are even regarded as attractive. Sound wormy is called for in such quantities that the mills have had no opportunity of late to acquire a surplus after disposing of the holdings piled up at a time when the distribution left something to be desired. So far the mills have been able to move all of their output at very acceptable figures, no important concessions being needed to attract buyers. As for the better grades of chestnut, they are quite strong, and there is every prospect of a continuance of the present activity. Oak is holding its own in the domestic market, all of the classifications of this wood commanding a receptive market, with the exception of planks, which have accumulated abroad to such an extent that most of the evils of congestion are revived. The easing off in the ocean freight rates, which might otherwise be an advantage, is to be regarded under the circumstances as a doubtful gain for the reason that it tends to encourage a continuance of forwardings when, with the rates as high as they were, the movement might be sufficiently checked to bring about a measure of recovery. Poplar is relatively weak abroad, but basswood and gum are firm and active, and there is every indication that they will continue thus.

COLUMBUS

Hardwood trade in Columbus and central Ohio has been rather firm during the past fortnight despite the general weakness shown in yellow pine. Both factories and yards are good buyers with the former the better customer. Prices are well maintained and no special weakness has appeared. Stocks in the hands of retailers are pretty fair and this means that they will have to move some of it before they are in the market for any large amount. Stocks in the hands of the mill owners are only fair, and reports show that no accumulation has taken place in the past few weeks. Building operations are still active, which will have the effect of maintaining quotations.

All grades are moving well, and as a result there is no especial surplus in any grade or variety. Both plain and quartered oak is in good demand and no weakness in price has appeared. There is also a good demand for poplar; the automobile concerns are buying the wide sizes more readily. Chestnut is a good seller and stocks are rather scarce. Basswood and ash are firm, and other hardwoods are unchanged.

CINCINNATI

The demand for hardwoods is not so good as it was a couple of weeks ago; in fact the demand has been slowing down for some time. Prices, however, have not been affected.

It appears that there has been a little excessive buying during the short crop period. Many large consumers, knowing the scarcity of dry stock, and preferring to be on the safe side, purchased heavily, the stock in the threatened flood districts which could be bought to advantage having without doubt been a factor. Wholesalers expect a steady demand during July and August but do not look for a heavy movement of hardwoods until fall or the latter part of the summer. Good sized stocks are in the hands of wholesalers of this vicinity but all are stiff in quotations and claim there will be no concessions made in order to move stock or to stimulate buying.

The poplar situation improves very little, demand coming in spots for the better grades and for wide stock. Prices remain firm, however, and accumulations at mill points are not excessive as yet. Low grades are moving very freely at good prices and no complaint; but many dealers would very much like to see a better demand for common and better and for wide stock

INDIANAPOLIS

The demand for hardwoods has not been unusual during the last two weeks, but it has been sufficiently large to keep most of the hardwood concerns active. Prices continue steady and show no signs of a break in the near future. There are ample cars, and shipments are moving with satisfactory promptness. All grades of oak and poplar are in special demand. There is also a good demand for mahogany veneers. Automobile factories are prolonging their season later than usual and this is being reflected somewhat in the demand for hardwoods. The automobile trade has been much better than was expected and the manufacturers still have many cars to build to meet this season's demands.

NASHVILLE

The condition of the Nashville hardwood market may be said to be satisfactory. While inquiries are probably not as large as they have

been, shippers and manufacturers report a fairly good demand, with prices continuing firm. Members of the local trade do not predict any easing up in values, but are optimistic as to the future of the market. Oak continues most active, and ash is a good seller in limited supply. Chestnut and poplar are in fair demand.

MEMPHIS

The hardwood market here continues in a very healthy position. There has been a good demand recently from both consuming and distributing centers, particularly the North and East. Business with the West has not been quite so good as usual at this time. The northwestern markets, too, have been a little slow. It is noteworthy, however, that there is a large foreign demand and that export business is on a big scale, not only from Memphis proper but from other points in this territory. Manufacturing operations have been on a pretty full scale during the past few weeks and a large amount of lumber has been produced. However, stocks are still broken in some directions and there is no pressure on the part of holders to sell.

Plain oak occupies a particularly strong position in all grades while there is a very good demand for quartered oak. The market is firm on both cottonwood and gum in the lower grades. The supply is rather below requirements and prices are in favor of the seller. The upper grades of gum and cottonwood are neither so firm nor so active as the lower but there is a fair volume of business offering in these. Ash is selling without difficulty. There is a fairly active call for the lower grades of cypress but uppers are relatively slow. Sap gum is moving more freely than red, though the latter is reported a little more active than a short time ago, particularly in stock thinner than 1 inch. This is the direct result of the export demand which includes thin red gum.

LOUISVILLE

As far as new business is concerned, local hardwood concerns report that trade is seasonably quiet. All conditions conspire to prevent much new business from being placed, and the result is that buyers are ordering only as they need to. The railroads, which begin a new fiscal year July 1, are buying as little as possible in order to enable the closing year to make a good showing on operating expenses, and the furniture manufacturers, another branch of large consumers, are doing little in anticipation of getting a fresh line on business at the semi-annual shows. Hence inquiries and orders are not as numerous as they were last month; but this does not mean that trade is dull, for as a matter of fact the business already booked by local concerns is sufficient to enable shipping to be continued in large volume. June, 1913, is making a much better showing than the corresponding month of last year, and compares favorably with last month, which set a new record in volume for some local houses. Not giving account to business already contracted for, and considering the market as it relates to orders now being placed, it may be said that quartered oak is the leader in strength, that plain oak is probably less active than it has been, and that chestnut and poplar are fairly slow movers. Ash is going well, and hickory is in fairly good demand, the wagon makers having had a big season.

MILWAUKEE

The outlook in the lumber trade seems to be especially bright at this time, and lumbermen believe that a big business may be expected later in the summer and in the fall. One of the most favorable signs is the excellent crop outlook, which ought to assure a satisfactory business in most lines of industry.

Building operations in Milwaukee up to this time have established a new high record, while the prospects are bright for the remainder of the season. The building record for the first five months of the year is more than $1,000,000 ahead of the same period in 1912. This is interesting in view of the fact that an unusually high record was established a year ago. June shows considerably more activity than the corresponding month a year ago and more than $600,000 will be spent in erecting various buildings under permits to be issued during the remainder of the present month.

Hardwood buyers are still holding off as much as possible, evidently in the belief that prices will go lower when new hardwood is in better shipping condition. The market is still strong, however, as the supply of northern woods is light. Firsts and seconds birch and basswood are scarce and are higher in some instances. Demand for maple is strong. Plain and quarter-sawed oak is in brisk demand and prices are being well maintained.

Several of the larger hardwood consuming concerns are taking their mid-year inventories and this naturally curtails buying to a certain extent. Demand from the furniture plants is expected to take on new life some time next month, as most of these concerns are meeting with a good business.

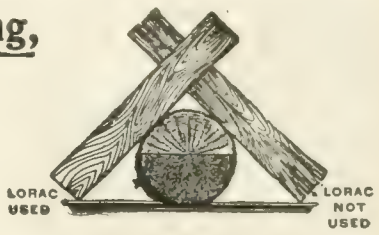
BRISTOL

Lumbermen of Bristol report that the hardwood lumber trade continues brisk. They do not expect the usual period of summer dullness this year, on account of the brisk state of trade and the demand for stocks. All mills are running and are pretty well sold up. Shipments of late have been heavy and conditions have been very favorable to the mill men.

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200,000 ft. 28" and up White Oak logs.
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WANT FOLLOWING CARS OF

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Plain and Quartered

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MISCELLANEOUS

FOR SALE

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FOR SALE.

1 Lane Mfg. Co.'s saw mill.
1 Berlin swing cut-off saw.
1 Defiance bolter 10'.
1 Bentel Margedant gang rip.
1 self-feed rip saw.
1 American Sawmill Machine Co.'s cross-cut saw.
1 American Sawmill Machine Co.'s wood splitter.
1 Edwards log turner.
1 24" Defiance turning lathe.
S. N. BROWN & CO., Dayton, Ohio.

HOISTS AND DERRICK IRONS.

for handling logs at mill.
THE NEW ALBANY MFG. CO., New Albany, Ind.

FOR SALE.

A first-class one band sawmill complete, with planing mill and larger burner in connection. All in good condition,—boilers, engines, etc. Will sell machinery on reasonable terms. For further particulars address,

BATCHELOR TIMBER CO., Saginaw, Mich.

WANTED—HARDWOOD LUMBERMEN— to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on waterproof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns. HARDWOOD RECORD,

537 So. Dearborn St., Chicago.

Special Inducements TO Wood Working Plants

We know of several very desirable locations for Wood Working plants near to the country's greatest source of hard woods and where prices are the lowest in America.

Ample labor, low priced power and excellent transportation facilities go to make these openings very desirable.

Extra inducements as free sites, tax exemption or stock subscriptions will be given manufacturers of good faith and ability.

Our free services are at your command in aiding you to find a favorable location.

M. V. Richards
Land and Industrial Agt.

SOUTHERN RAILWAY
Room 305 Washington, D. C.

GIBSON TALLY BOOK



This three-throw tally ticket cover is made from aluminum, and accommodates four tally tickets—4¼x8⅛ inches in size.

Folds compactly to less than one-fourth inch in thickness and fits side or inside coat pocket.

Gives large area of four tickets for complicated tallies, or straight grade can be made on one page.

Accommodates any form of tally ticket desired.

Special, patented, triplicate tally tickets supplied, printed on waterproof paper with carbon backs. Tallies made on these tickets are unalterable. Their use enables the inspector to retain triplicate, and forward original and duplicate. Duplicate designed to be attached to invoice.

These tally books are perfection for durability, covenience, accuracy, and for systematizing the inspection and measurement of lumber

Patent applied for on covers. Copyrighted, 1910. Triplicate Tally Tickets patented.



PRICE LIST

Aluminum Tally Covers, each - - -	$ 1.00
Aluminum Tally Covers, per dozen - - -	10.00
Patented triplicate Tally Tickets (stock form) per 1,000	10.00
Single sheet manila (stock form) Tally Tickets, per 1,000	4.00

Specimen forms of Tally Tickets mailed on application. Covers sold on approval to responsible concerns.

Manufactured by

Hardwood Record
537 S. Dearborn St., CHICAGO

CHICAGO

Osgood & Richardson
935 Peoples Gas Bldg.

NORTHERN AND SOUTHERN HARDWOODS

Chicago Agents: LAMB-FISH LUMBER CO.

E. H. KLANN LUMBER CO.

Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

819 FISHER BLDG. HAR. 1187

Factory Lumber
GRAY'S HARBOR SPRUCE
SOFT YELLOW FIR
WESTERN SOFT PINE
DIRECT MILL REPRESENTATION
E. B. Nettleton 1103 Fisher Building CHICAGO

A Veneer Gauge is the answer to a Veneer User's craving for years. This "Walker Brand" Veneer Gauge is a steel gauge that will satisfy your wants for all time. You can't do yourself a better turn than to buy one of these gauges. It gauges ACCURATELY every thickness from 1-40 inch to ⅝ inch INCLUSIVE. Wake up to this opportunity. Price only $1.98 delivered by U. S. Mail Order now, today. Address—6456 Woodlawn Ave. Phone Hyde Park 88.

Dept. C **WALKER BIRD'S EYE** CHICAGO

COUNTERFEIT CHECKS

are frequent except where our

Two Piece Geometrical Barter Coin

is in use, then imitation isn't possible. Sample if you ask for it.

S. D. CHILDS & CO.
Chicago

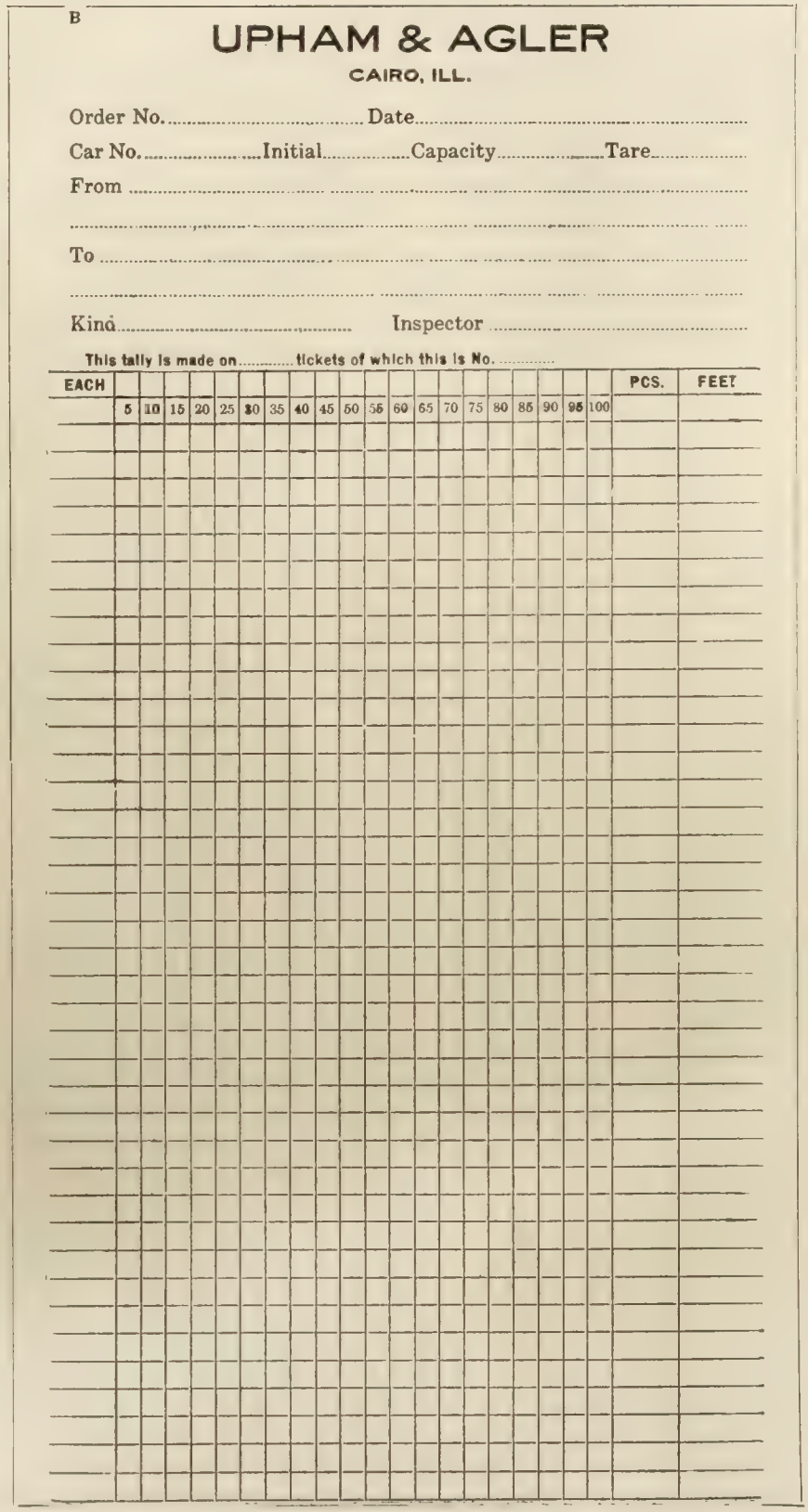
We also make Time Checks, Stencils and Log Hammers.



Gerlach Modern Machines
COOPERAGE STOCK and BOX SHOOKS
Circular, Band and Cylinder Saws
SAW AND LOG TOOLS
THE PETER GERLACH CO., Cleveland, Old City, U.S.A.

¶ The Gibson Aluminum Tally Book Cover and Tally Tickets are now employed by more than 2,000 lumber manufacturers, dealers and consumers.

This is Form B



B

UPHAM & AGLER

CAIRO, ILL.

Order No. ..... Date .....

Car No. ..... Initial ..... Capacity ..... Tare .....

From .....

.....

To .....

.....

Kind ..... Inspector .....

This tally is made on ..... tickets of which this is No. .....

EACH	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	PCS.	FEET

Of Single Duplicate or Triplicate Lumber Tally Ticket (without Loose Carbon Sheets) used in the

Gibson Aluminum Tally Book Covers

MANUFACTURED BY

HARDWOOD RECORD

537 S. Dearborn Street

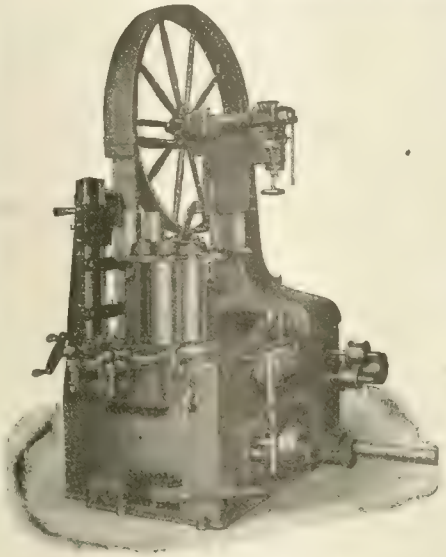
CHICAGO

Let us send you catalogue and price list of scores of forms of lumber, flooring and log tally tickets.

The Gibson Tally Book System has more than 2,500 users.

EFFICIENCY

A Specialty - Not a Side Line



NEW Standard 54-inch Band Resaw

Bellhaven, N. C.
Oct. 19, 1912
Gentlemen:
The NEW Standard [illegible] Band Resaw and we installed some time ago has given us satisfaction and is at the present time answering in an efficient manner the purpose for which it was installed.
Yours truly,
THE INTERSTATE COOPERAGE CO.

Wm. B. Mershon & Co.
SAGINAW MICH.



Phoenix 6 ft. Pony Band Mill

Will cut 30,000 feet of 1" lumber in 10 hours and cut it good.

Nearly 200 of these mills sawing wood in the U. S. A.

PRETTY GOOD RECOMMENDATION, ISN'T IT?

MODERATE PRICE

PHOENIX MFG. CO.
EAU CLAIRE WISCONSIN



This New CLYDE Overhead Cableway Skidder Saves $74.67 a Day in Labor Alone!!

In an actual test recently conducted on the Smoky Mountains, it cost, **on an average taken over three consecutive weeks,** $14.75 for a day's labor with six men to get 25,725 feet of logs with this new CLYDE, while it cost $89.42 for three and a third days' labor with ten men to get 25,725 feet of logs with a big fifteen thousand dollar machine working under exactly the same conditions.

The difference is $74.67 a day in favor of the new CLYDE OVERHEAD — that's $23,371.71 a year, more than two and a half times the cost of this new machine for mountain logging.

Of course, the first cost of a CLYDE OVERHEAD SKIDDER is low, we admit that—it's less than two-thirds that of the machine it was tried out against.

Let us send you full details of this remarkable showing and of the machine that accomplished it!

CLYDE IRON WORKS

LARGEST MANUFACTURERS
of
PROVENLY EFFICIENT LOGGING MACHINERY IN THE WORLD

"A Machine for EVERY Logging Operation"

Home Office and Factory:
Duluth, Minn., U. S. A.

The CHEAPEST HARDWOOD LOGGING

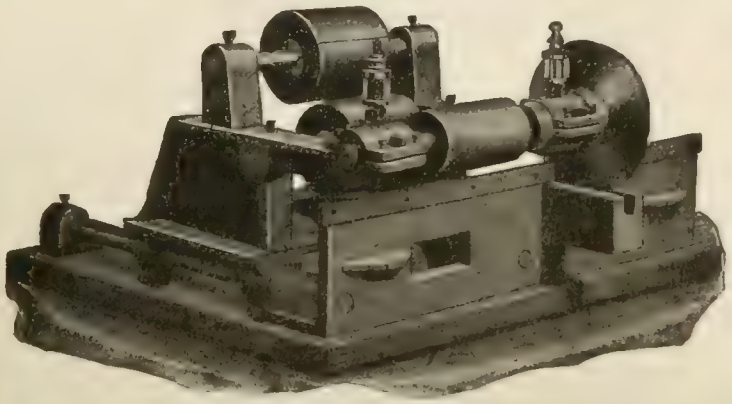
IS DONE WITH



LIDGERWOOD CABLEWAY SKIDDERS

LIDGERWOOD MFG. CO.
96 Liberty Street, New York

Branch Offices
CHICAGO, SEATTLE
Agencies
NEW ORLEANS-WOODWARD, WIGHT & CO. LTD.
CANADA-ALLIS CHALMERS BULLOCK LTD.
MONTREAL VANCOUVER



BUTTING SAW

for

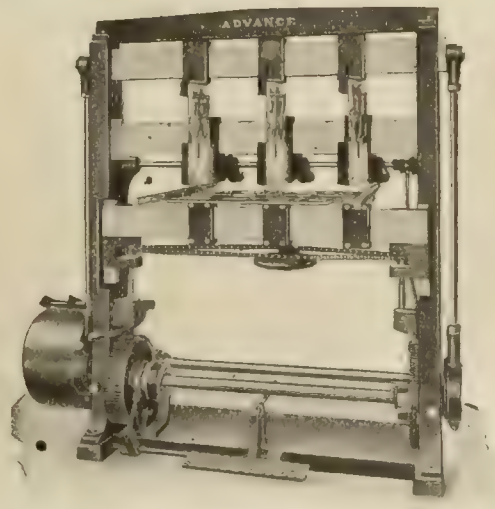
Flooring Factories

For cutting out defects and making square and smooth ends for end-matching machines. Used by the largest producers. Write for particulars and prices.

Manufactured by

Cadillac Machine Co.
CADILLAC, MICH.

Wire Stitching Machinery



FOR

Crates, Veneer and Resawed Lumber Boxes, Also Wire and Metal Bound Boxes,

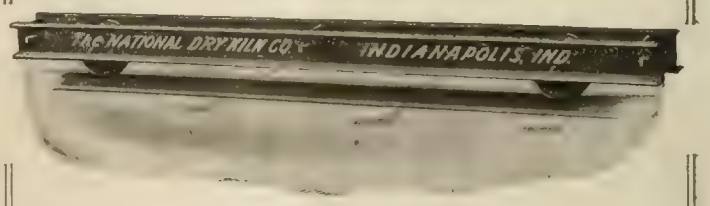
FRUIT PACKAGES, BASKETS, FIBER SHIPPING CASES, PAPER BOXES AND SPECIAL PURPOSES

ASK FOR CATALOGUE

Manufactured by

SARANAC MACHINE COMPANY
BENTON HARBOR, MICH., U. S. A.

Kiln Truck



We make all styles of Kiln Trucks, Transfer Cars. They are roller-bearing, steel or malleable iron wheels. We have one contract for 4,500 6½′ trucks.

Always a large stock of material on hand. Can make prompt shipment.

The National Dry Kiln Company
Indianapolis, Indiana

WISCONSIN

WHERE THE FINEST NORTHERN HARDWOODS GROW

Scott & Howe Lumber Co. — Medford Lumber Co.

NELS DUEHOLM, Sales Manager

Old National Bank Building — **OSHKOSH, WISCONSIN**

WE HAVE ON HAND

5,500,000 4/4 & THICKER BIRCH
2,600,000 4/4 & THICKER HARD MAPLE

Cut out of the finest lot of logs in the Northwest and manufactured as lumber should be. Try a sample car and you will always be our customer.

WE MANUFACTURE MICHIGAN HARDWOODS AND HEMLOCK. MILLS ELECTRICALLY DRIVEN; STOCK BAND SAWN

Have in Shipping Condition

4/4, 5/4, 6/4 and 8/4 BIRCH also a good stock of Hemlock Dimension & Tamarack Bridge Plank

WILL BE PLEASED TO QUOTE PRICES ON APPLICATION

THE C. A. GOODYEAR LUMBER COMPANY

Office and Mill at TOMAH, WISCONSIN — Logging Camp BLUE BILL, MICHIGAN

MAPLE BIRCH BASSWOOD

DRY STOCK

Ready for Shipment

MAPLE
2″ No. 1 Common & Better

BIRCH
1″ No. 1 Common & Better
1¼″ No. 1 Common & Better
1½″ No. 1 Common & Better

BASSWOOD
1″ No. 1 Common
1¼″ No. 1 Common

Brown Bros. Lumber Co.
Rhinelander, Wis.

For Veneer and Panel Manufacturers

Your Consumers' Lists Cost You BIG MONEY

We can save it all and relieve you of all the detail and effort necessary to tabulate consumers' wants. **Our Card Index System of those wants,** just out, is the result of systematic effort. It is endorsed by your competitor.

Can You Afford to Give Him that Advantage?

HARDWOOD RECORD — **CHICAGO**

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

Custom Mill Work, Storage, Inspection

ON

Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co. Long Island City, New York

"SOVEMANCO."

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard. LOUISVILLE, KY. Mills, Magnolia, Standard and 21st Sts.

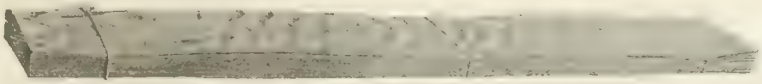
Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co. *Wausau, Wis.*

VENEERS AND PANELS

OUR SPECIALTY
Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.
ROACHDALE, IND.
H. I. CUTSINGER, Gen'l Mgr.

B. C. JARRELL & CO.
MANUFACTURERS OF
High Grade, Rotary-Cut Gum
VENEERS
Cut right; dried right; prices right
HUMBOLDT, · TENNESSEE

CIRCASSIAN
A MARKED INCREASE IN THE USE IN U. S. FOR 1911 SHOWN BY GOVERNMENT FIGURES.
AN EVEN GREATER INCREASE IS INDICATED FOR THIS YEAR.
BUY WHERE YOU CAN HAVE PICK OF LARGE ASSORTMENT OF HIGH-GRADE WOOD—WHICH WE ARE FEATURING.
Adams & Raymond Veneer Company
Indianapolis

CIRCASSIAN MAHOGANY
Logs VENEERS Lumber
WE IMPORT WE MANUFACTURE
All Thicknesses of Mahogany
Ready for Shipment
RICE VENEER & LUMBER CO.
GRAND RAPIDS, MICH.

Hoffman Brothers Company
Sliced and Sawed, Quartered and Plain Red and White Oak
Walnut Cherry Ash Maple
Let us Send You Our Stock List FORT WAYNE, IND.

89%
of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

The Central Veneer Co.
SOFT YELLOW POPLAR
CROSS BANDING
Huntington, West Virginia

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - WELLS, MICHIGAN

FORMAN'S FAMOUS OAK FLOORING

Is made in faultless fashion from the most uniform-colored and even-textured oak produced; worked from Kraetzer-Cured lumber manufactured at our Heidelberg, Ky., sawmills.

Thomas Forman Company

Detroit : : : : : Michigan

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MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

100 M Ft. 4/4 No. 1 and 2 Common Birch.
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100 M Ft. 5/4 No. 1 and 2 Common Maple.
100 M Ft. 6/4 No. 1 and 2 Common Maple.

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

"Chief Brand" Maple and Beech Flooring

in 3/8, 1/2 and 13-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

For the Better Kind of Hardwoods

write

EAST JORDAN LUMBER CO.

East Jordan, Mich.

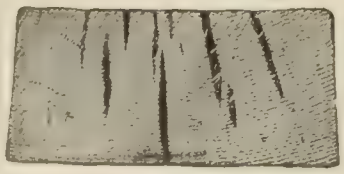
ALL THE MICHIGAN HARDWOODS

Makers of

LATH SHINGLES — **Imperial Brand** MAPLE FLOORING — PINE AND HEMLOCK

S. L. EASTMAN FLOORING CO.
SAGINAW GRAND
MAPLE FLOORING
SAGINAW, MICH.

89% of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

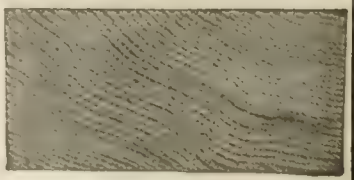


Lumber Dried As Never Before

SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN

GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN



THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

Our Corps of Inspectors

Intelligent! Highly Trained!

Conscientious!

Is assurance that you will get what your order calls for when you buy Gum from us.

Himmelberger-Harrison Lumber Company

Cape Girardeau, Missouri

Baker-Matthews Manufacturing Co.

Sikeston, Mo.

Band Sawn Southern Hardwoods

SPECIALTIES

RED GUM, PLAIN OAK

SEND US YOUR INQUIRIES

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg. ST. LOUIS

MANUFACTURERS

Three Mills

Frank Purcell Kansas City U. S. A.

Exporter of Black Walnut Logs

JO MARK

FIGURED WALNUT IN LONG WOOD AND STUMPS

Salt Lick Lumber Co.

SALT LICK - - - - KENTUCKY

MANUFACTURERS OF

Eureka OAK AND BEECH **Oak Flooring**

Complete stock of 3/8" and 13/16" in all standard widths

Carolina Spruce Co.

MANUFACTURERS

Spruce & Hardwood

LUMBER

Mills: Pensacola, N. C. *Capacity* 90,000 ft. per day

Charles K. Parry & Co. Sole Selling Agts. Land Title Bldg. Philadelphia

Louisiana Long Leaf Lumber Co.

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Diamond 4 L Co. Brand

OAK FLOORING

A GUARANTEE OF PERFECTION

Boice Lumber Co., Inc.

Southern Hardwoods

MAIN OFFICE

RICHMOND, VIRGINIA

Yards: NORFOLK, ABINGDON, GRAHAM, VA., and NORTH WILKESBORO, N. C.

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The Foremost Hardwood Market of the East

G. ELIAS & BRO.
HARDWOODS
White Pine, Yellow Pine, Spruce, Hemlock, Fir, Lumber, Timber, Millwork, Boxes, Maple and Oak Flooring
955-1015 ELK STREET

I. N. Stewart & Bro.
Specialties
Cherry and Oak
892 Elk Street

Standard Hardwood Lumber Co.
OAK, ASH and CHESTNUT
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BUFFALO HARDWOOD LUMBER CO.
We want to buy for cash
OAK, ASH AND OTHER HARDWOODS
All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.
940 Seneca Street, BUFFALO

Hugh McLean Lumber Co.
OUR SPECIALTY:
QUARTERED WHITE OAK
940 ELK STREET

T. SULLIVAN & CO.
SPECIALTIES:
Gray Elm, Brown Ash
Pacific Coast Fir and Spruce
2 ARTHUR STREET

ORSON E. YEAGER
SPECIALTIES:
Oak, Ash and Poplar
932 ELK STREET

ANTHONY MILLER
HARDWOODS OF ALL KINDS
893 EAGLE STREET

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.



A Method

That effects the Cost and Quality of Manufacturing

The automatic method of jointing lumber on one machine has gone through the incubation period and its value and guarantee to you is the successful operation of over one hundred machines making the perfect and permanent

TAPER WEDGE DOVETAIL JOINT

Quality at a minimum cost is the object of every manufacturer and every detail for the saving of lumber, glue and labor operations has been carried out in the new

LINDERMAN AUTOMATIC DOVETAIL

RIPPER, JOINTER, GLUER, CLAMPER AND SIZER

With the newest attachment, the visible dial feeding fence, rough edge, waney lumber can be taken direct from the cut-off saw, built up into panels without edge and sizing waste and without ripping.

A thirty-two page catalog in three colors has just been issued, illustrating and giving in detail the advantages of automatic jointing with other information that is of value to every manufacturer. Upon request, it will be sent prepaid to your address.

LINDERMAN MACHINE CO.

MUSKEGON, MICH.

New York City **Knoxville, Tenn.** **Woodstock, Ont.** **St. Louis, Mo.**

Vansant, Kitchen & Company

Manufacturers Old-Fashioned Soft Yellow Poplar

5-8 and 4-4 in Wide Stock, Specialty

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

YOU pay a *little* more for our hardwood lumber than you do for many others', but it's worth *much* more.

With our modern and first-class equipment and expert operatives, we couldn't make bad lumber if we tried to, because the *quality* and *size* of our virgin tough mountain white ash, red birch, yellow poplar, buckeye, maple, red oak, cherry and basswood, averaging less than three logs to the thousand, and 95 per cent sixteen feet, is the best type of hardwood timber growth in the United States, and shows a larger percentage of *firsts*.

If you are a discriminating buyer, let's get acquainted.

LITTLE RIVER LUMBER COMPANY **Townsend, Tenn.**

W. H. White Company
Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.
Sales Office: BUFFALO, N. Y.

STOCK DRY—STANDARD GRADES—BEST MANUFACTURE—CAR OR CARGO SHIPMENTS

WE OFFER
All Kinds
OF
Hardwood and Hemlock
Lumber
Hardwood
Flooring, Lath
AND
Dimension Stock

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED
POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD

MEMBER HARDWOOD MANUFACTURERS ASSOCIATION OF THE U.S.

SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Hardwood Record

Eighteenth Year, Semi-Monthly.

CHICAGO, JULY 10, 1913

Subscription $2. Single Copies, 10 Cents.



ADVERTISERS' CLASSIFIED DIRECTORY FOLLOWS READING MATTER.



¶ When we say every month that we are always glad to be tested on rush orders, we mean just this, exactly.

¶ Never hesitate to call on us when you want the goods in a hurry.

¶ Prompt delivery is the "McIlvain Way."

Look over this month's "Lumber News"—If it is not on your desk, drop us a postal—it will be sent by return mail.

J. GIBSON McILVAIN & CO.

1420 Chestnut Street Philadelphia, Pa.

Cartier-Holland Lumber Company

TAKE NOTICE!

In the last three issues, we offered high grade **End Dried White Maple.** We now have left only 50,000′ of 1″, the balance of the stock having all been sold. Better take the matter up with us at once.

We also have the following items for shipment in July.

50,000′ 5/4 High Grade Common & Better Birch.

50,000′ 4/4 High Grade Common & Better Birch.

31,000′ 8/4 No. 1 Common & Better Cross Piled Sap Maple.

YOUR INQUIRIES WILL BE APPRECIATED

Ludington Michigan

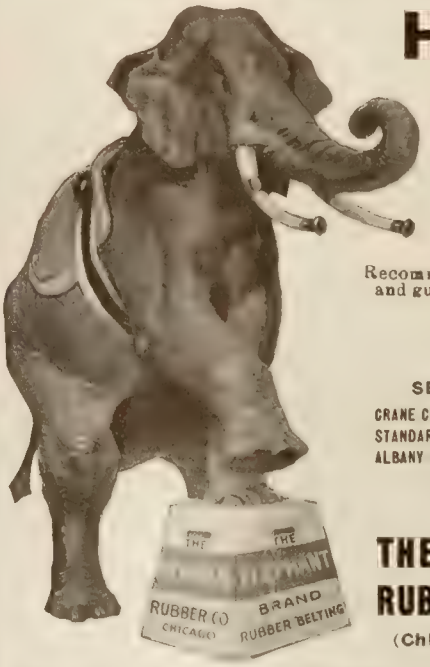
ELEPHANT RUBBER **BELTING**

AIR DRILL AND AIR TOOL **HOSE**

STEAM
WATER
SUCTION

EXTRA QUALITY

Recommended for hard service and guaranteed to do the work



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CRANE COMPANY - - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

THE MECHANICAL RUBBER COMPANY
(Chicago Rubber Works)

307 W. Randolph Street, CHICAGO
ESTABLISHED 1882

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

BASSWOOD

We Offer for Prompt Shipment

150,000 Feet

Dry 1 x 7 and wider Basswood Firsts and Seconds. Run about 75% clear, the defects are small and the stock is very bright and nice.

ESTIMATED WIDTHS

7 and 8 inch	34%
9 and 10 inch	35%
11 and 12 inch	27%
Wider than 12 inch	4%

ESTIMATED LENGTHS

6 and 8 feet	8%
10 and 12 feet	20%
14 feet	20%
16 feet	49%
Odd lengths	3%

July 10, 1913

COBBS & MITCHELL, Inc.

Sales Department

CADILLAC MICH.

Mitchell Brothers Co.

Dry Stock List

MICHIGAN HARDWOODS

Cadillac, Mich. **July 10, 1913**

1x4 Basswood, No. 1 Common, 11 M.
1x7 & up Basswood, No. 1 Common (Part Dry), 18 M.
4/4 Cadillac Gray Elm, 1s & 2s, 94 M.
4/4 Cadillac Gray Elm, No. 1 Common, 76 M.
4/4 Cadillac Gray Elm, No. 2 Common, 66 M.
4/4 Cadillac Gray Elm, No. 3 Common, 65 M.
4/4 Rock Elm, No. 2 Common & Better, 7 M.
4/4 Soft Maple, No. 2 Common & Better, 9 M.
4/4 White Maple, End Dried (Clear), 14 M.
5/4 White Maple, End Dried (Clear), 3 M.
4/4 Birdseye Maple, 1s & 2s, End Dried, 1½ M.
4/4 White Pine, No. 3 Common, 20 M.

CADILLAC QUALITY

When you want lumber of Cadillac Quality, Lumber which has been manufactured and seasoned properly, and grades which have not been blended to meet price competition—send us your inquiries.

WE SELL ONLY MITCHELL'S MAKE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

100,000 ft. 5/4 1st & 2nds Basswood

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



Ready for Shipment

Ten cars
4/4 No. 1 Common & Better Birch

Five cars
6/4 No. 1 Common & Better Birch

Two cars
8/4 No. 1 Common & Better Birch

Two cars
4/4 No. 2 Common & Better Ash

Five cars
4/4 No. 2 Common S. Elm

Five cars
4/4 No. 2 Com. & Better Basswood

Above cut from virgin timber. Grade and manufacture are first class.

Mears-Slayton Lumber Co.
1237 Belmont Ave. Chicago, Ill.

15,000,000 Feet Always On Hand



Our Double Band Mill

Huttig, Ark.

With two mills like this we manufacture 40,000,000 feet of band sawn southern hardwoods annually. We guarantee our lumber to be of excellent widths, full thickness, and to contain 50% to 75% of 14′ and 16′ lengths. We make high grades and all of the "CREAM" is in each grade. Send us your inquiries.

"Wislumbco Standards"

50,000	ft.	4	4 1st & 2nd Red Gum
40,000	"	4	4 No. 1 Common Red Gum
75,000	"	4	4 x 13 to 17" Box Board Tupelo
30,000	"	4	4 x 13" & Wider 1st & 2nd Tupelo
65,000	"	4	4 x 6 to 12" 1st & 2nd Tupelo
50,000	"	4	4 x 13 to 17" Box Board Sap Gum
50,000	"	4	4 x 13" & Wider 1st & 2nd Sap Gum
75,000	"	4	4 x 6 to 12" 1st & 2nd Sap Gum
75,000	"	4	4 No. 1 Common Sap Gum
60,000	"	4	4 No. 2 Common Sap Gum
50,000	"	6	4 Log Run Soft Maple
75,000	"	4	4 Shop Cypress
60,000	"	4	4 No. 1 Common Cypress
25,000	"	8	4 Log Run Hickory
100,000	Pcs.	1¼	x1¼ 19 Oak Squares

A good stock of Oak, Gum, Cypress, Cottonwood, Elm and Maple

Wisconsin Lumber Co.
CHICAGO

MILLS
Huttig, Ark.
Deering, Mo.

FLANNER-STEGER LAND & LUMBER CO.

MAPLE AND BIRCH FLOORING

of unexcelled manufacture and quality. Also Manufacturers of Basswood, Birch, Elm, Maple and Hemlock.

SEND US YOUR INQUIRIES

MILLS:
BLACKWELL, WISCONSIN

GENERAL SALES OFFICE
1704 STEGER BLDG., CHICAGO, ILL.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

J. RAYNER
VENEERED PANELS
ALL WOODS
SEND FOR STOCK LIST
MAHOGANY LUMBER
CARROLL AVE. AND SHELDON ST.
CHICAGO

Estabrook-Skeele Lumber Co.
MANUFACTURERS AND DEALERS IN
Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods
In the Market for Round Lots of Hardwood
WRITE US BEFORE SELLING
Fisher Building, - - - CHICAGO
'PHONE HARRISON 1984

EVERYTHING TO A DOOR

The veneers for stiles and rails, 1/8", 3/16" and 1/4".

The veneers for the panel faces, 1/20", 1/16" and 1/8". In Rotary Cut Oak, Quartered Oak, Birch, Yellow Pine, Mahogany, etc. And in Gum, Poplar, Basswood, etc., for centers.

Also 5/16" and 3/8" 3-ply panels, all sizes, in Oak, Birch, Yellow Pine, and Mahogany.

Send us your inquiries

HUDDLESTON-MARSH LUMBER CO.
2254 Lumber Street, Chicago

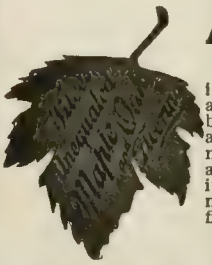
CURLY BIRCH

It is seldom that a large shipment of this wood shows marked uniformity.

We have just received 150,000 ft. in one lot that, while unselected, is quite unusual in the evenness of color and figure.

This is a real opportunity for fixture makers if they will write, call or wire at an early date.

VENEER MANUFACTURERS COMPANY
CHICAGO ILLINOIS



A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company
22nd and Throop Sts. CHICAGO, ILL.

WANTED — Moulding or Water Stained Poplar, inch thick; stain and pin wormholes not considered defects, but must be practically free of knots.
HAYDEN & WESTCOTT LUMBER COMPANY
823 Railway Exchange Chicago, Illinois

¶ For items of Hardwood Stock or Hardwood Machinery, you will find it advantageous to write our advertisers. Get in touch!

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO.

KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK

OUR SPECIALTY

MANUFACTURERS OF

QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER

BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER, Pres. — J. M. LOGAN, Gen'l Manager

C. C. CANNON, Vice-Pres. — C. R. SWANN, Sec'y and Treas.

J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS

HARDWOODS AND PINE

POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:
Bank and McLean Ave., Cincinnati — I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.
RED OAK—Plain or Quartered.
CHESTNUT — BASSWOOD
POPLAR — WHITE PINE

Always carry large well assorted stock of all kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR, OAK, CHESTNUT, WHITE AND YELLOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

"THE VERY BEST"

Red Birch

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

Kimball & Kopcke

Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

CINCINNATI
THE GATEWAY OF THE SOUTH

L. W. RADINA & CO.
DEALERS IN
POPLAR AND HARDWOODS
CINCINNATI : : OHIO

Lest You Forget
and
You probably don't know that we are now
Manufacturing in White and Red Plain and Quarter-Sawed **OAK**
3/8, 1/2, 5/8, 3/4, 4/4, 5/4 — 100,000 Feet per Day
EXPORT AND DOMESTIC
BENNETT & WITTE
MEMPHIS, TENN.
NEW ORLEANS, LA. CINCINNATI, O.
CABLE ADDRESS, ALL OFFICES, "BENNETT"

W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.
The W. E. Heyser Lumber Company
MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio
BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky
12,000,000 ft. High Grade West Virginia and Southern Hardwoods in stock at all times.
Shipments made direct from our own yards and mills in straight or mixed cars.
SEND US YOUR INQUIRIES

Eventually—Why Not Now?
Eventually you will buy a carload of our Plain Oak and Quartered Oak or our Poplar—WHY NOT BUY IT NOW?
If our salesman does not call on you, send us a list of your requirements, and LET US quote you.
The Mowbray & Robinson Co., Cincinnati Ohio
Manufacturers **Plain and Quartered Oak and Poplar Band Sawed Stock**
Mills QUICKSAND, KY. WEST IRVINE, KY. SOFT EASTERN KENTUCKY OAK

The Maley, Thompson & Moffett Co.
Veneers, Mahogany and Hardwood Lumber
Largest Stocks Best Selections
CINCINNATI, OHIO

If you want to reach the wholesale consumers of hardwood lumber throughout the United States, a HARDWOOD RECORD advertisement will do it for you.

If you want to reach the hardwood manufacturers of the United States, a HARDWOOD RECORD advertisement will do it for you.

The HARDWOOD RECORD represents high-class, special, class circulation, with a minimum of waste circulation.

Ask any HARDWOOD RECORD advertiser for experience on results.

LAMB-FISH LUMBER CO.

MEMBER HARDWOOD MANUFACTURERS ASSOCIATION OF THE U.S. — A Guarantee of a Square Deal in both Grade and Measurement

Band Mill and General Offices

CHARLESTON, MISS.

THE LARGEST HARDWOOD MILL IN THE WORLD—ANNUAL CAPACITY 40,000,000

We Produce Kraetzer-cured LUMBER

STOCK LIST—Dry Lumber on Hand July 1st, 1913

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	12/4	16/4
FAS Qrtd. White Oak	....	25,000	.	.	..	..	6,000	....	...	...
FAS Qrtd. White Oak 10" & up	.	.	.	.	12,000	...	....	....	.	..
No. 1 Com. Qrtd. White Oak	..	..	.	30,000	150,000	...	.	....		...
No. 2 Com. Qrtd. White Oak	.....	.....	.	.	24,000	..	.....	.....		...
FAS Plain White Oak	....	....	.	..	150,000	...	11,000	.		2,000
No. 1 Com. Plain White Oak	..	..	25,000	20,000	200,000	12,000	20,000	.		...
FAS Plain White Oak 10" & up	...	.....	...	4,000	.	....	.....	....		....
FAS Plain Red Oak	..	.	..	..	100,000	....	.....	6,000		1,000
No. 1 Com. Plain Red Oak	....	....	20,000	15,000	130,000	..	....	....		...
Com. & Btr. Qrtd. Red Gum	....	.....	.....		25,000	...	.....	.....		.
FAS Plain Red Gum	....	500,000	400,000	40,000	400,000	600,000	100,000	75,000	60,000	3,000	....
No. 1 Com. Plain Red Gum	.....	30,000	20,000	20,000	75,000	300,000	60,000	.. ..	....	. .	.. .
FAS Sap Gum 13"-16"	.....	.....	.....			60,000	.....	.	....		...
FAS Sap Gum 18" & up	.. ....	.	. .			15,000	. .	.	...		.
FAS Sap Gum 6" & up	....	30,000	25,000	22,000	50,000	15,000	..	.	...		.
No. 1 Com. Sap Gum 4" & up	.. ..	30,000	20,000	20,000		250,000	..	.	...		
No. 2 Com. Sap Gum 3" & up	.. ..	80,000	50,000	.			....	.	..		
Shop & Better Cypress	.....	.	..	.	.	100,000	..	200,000	10,000		.
Com. & Better Tupelo	.. .. ..	.	..	.	.	100,000	....	.....	.....		. . .

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% 14' AND 16' LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS AND BRIDGE PLANKS. FACILITIES FOR KILN DRYING, DRESSING AND KRAETZER CURING.

GOOD GRADES "STEARNS QUALITY" PROMPT SERVICE

LUDINGTON

HARDWOOD SPECIALISTS

The care we give our lumber plays an important part in sustaining the

STEARNS QUALITY

The problem of drying thick lumber thoroughly without checking excessively has given manufacturers considerable trouble, but we have solved the problem.

We have a fine assortment of perfectly dried

LOWER PENINSULA STOCK



PROTECTION AGAINST CHECKING

SOFT GRAY ELM

In Full or Mixed Carloads:

60 M ft. 4/4 1s & 2s.
40 M ft. 6/4 1s & 2s.
20 M ft. 8/4 1s & 2s.
15 M ft. 10/4 1s & 2s.
35 M ft. 12/4 1s & 2s.
10 M ft. 16/4 1s & 2s.
80 M ft. 4/4 No. 1 Common.
65 M ft. 6/4 No. 1 Common.
25 M ft. 8/4 No. 1 Common.
12 M ft. 10/4 No. 1 Common.
16 M ft. 12/4 No. 1 Common.
7 M ft. 16/4 No. 1 Common.

The STEARNS SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

Our Specialties:

Cottonwood—Red and Sap Gum | **Oak** Plain and Quartered Red and White | **Three Ply Red Gum Panels**

A Few Items We Want To Move

5 Cars 4 4″ x 18″ to 22″ 1st & 2nds Cottonwood
5 Cars 4 4″ x 13″ to 17″ 1st & 2nds Cottonwood
10 Cars 4 4″ x 13″ to 17″ Cottonwood Box Boards
5 Cars 5 8″ 1st & 2nds Sap Gum
2 Cars 3 4″ 1st & 2nds Sap Gum
4 Cars 4 4″ 1st & 2nds Sap Gum, 13″ to 15″ wide
1 Car 5/4″ 1st & 2nds Sap Gum
1 Car 6/4″ 1st & 2nds Sap Gum
2 Cars 5/8″ 1st & 2nds Red Gum
1 Car 3 4″ 1st & 2nds Red Gum
10 Cars 4 4″ 1st & 2nds Red Gum
2 Cars 5 4″ No. 1 Common Red Gum
1 Car 5/8″ 1st & 2nds Plain Red Oak
3 Cars 3/4″ 1st & 2nds Plain Red Oak
4 Cars 4/4″ 1st & 2nds Plain Red Oak
4 Cars 5 8″ No. 1 Com. Plain Red Oak
1 Car 3 4″ No. 1 Com. Plain Red Oak

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY

Memphis **BOX SHOOKS ann VENEERS** **Tenn.**

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Cherokee Lumber Co.

Manufacturers of

Band Sawn Lumber

Nashville, Tenn.

We will name very attractive prices on a few cars of each of the following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4/4 and 8/4 Sap Poplar.
1¼″, 1½″ and 2½″ No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17″, 18 to 23″ and 24″ and up.
4/4 x 13 to 17″ Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
8/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF

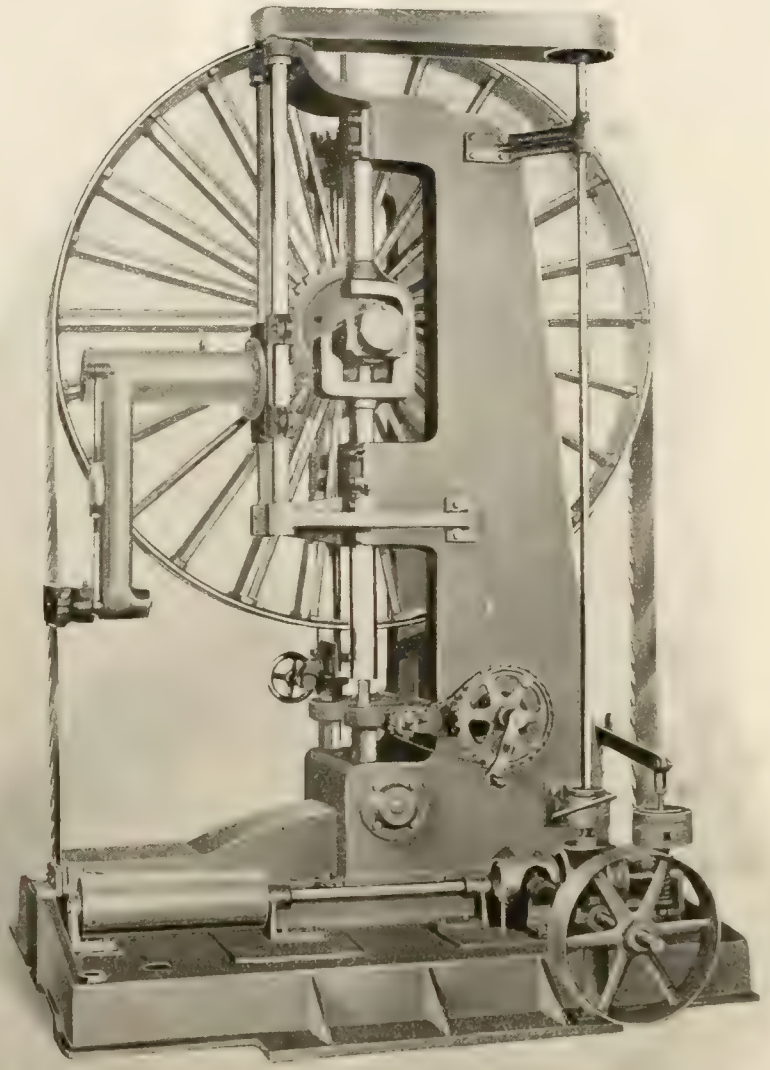
Hardwood Lumber

Nashville, Tenn.

SECURE BETTER PRICES

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

ASK US ABOUT IT



The Newest Hoosier Band Saw Mill

We have been building band mills for thirty-five years and this New Hoosier Band Saw Mill represents the experience of these years.

The simplest mill in construction and the easiest kept in order.

We build this mill in three sizes, 6, 7 and 8 ft. The widest saw the 6 ft. mill will carry is 10″; the 7 and 8 ft. mills will carry 10, 11 or 12″ saws. This mill is built in a substantial manner and embodies all that is latest and best in Band Mill design. The base is of the heavy extension pattern and is so constructed that it does not overhang the foundation but extends completely around the mill. By means of the construction of the column the upper wheel runs in the center of the mill and is supported both above and below the mandrel. The bearings are long and are chain oiling.

The tension device has roller bearings and is very sensitive and durable. The upper guide is raised and lowered by power and is nonbreakable. The lower guide is so arranged that it can be opened quickly. The roll back of the saw is power driven.

The 6 ft. mill will split a 48″ log and lay down a 30″ board between saw and column; the 7 ft. will split a 54″ log and lay down a 36″ board, the 8 ft. will split a 57″ log and lay down a 42″ board.

The Sinker-Davis Co., Indianapolis, Ind.

Makers of Hoosier Saw Mill Machinery

The Louisville Hardwood Club

is offering a number of specialties which will repay the attention of buyers. The stock referred to below is in excellent condition, contains a good percentage of extra widths and lengths, and will be sold at a price which will make the business profitable to the purchaser. The usual combination of quality lumber and high-grade service characteristic of the Hardwood Club of course applies on these offerings, which the members of the club announce as follows:

Ohio River Sawmill Company: 1 car 1" firsts and seconds quartered white oak; 1 car 5-4, 6-4 and 8-4 firsts and seconds quartered white oak; 1 car 1" No. 1 common quartered red oak; 1 car 3-4 firsts and seconds plain red oak; 1 car 3-4 No. 1 common plain red oak; 3 cars 1" firsts and seconds plain red oak; 2 cars 1" firsts and seconds plain white oak; 2 cars 1" firsts and seconds poplar; 4 cars 1" sap poplar; 2 cars 1" sap-stained poplar; 2 cars 9' to 12' poplar boxboards; 1 car 5-4 No. 1 common poplar; 2 cars 1" firsts and seconds chestnut; 2 cars 1" No. 1 common chestnut; 1 car 6-4 firsts and seconds chestnut; 1 car 1" firsts and seconds basswood.

W. P. Brown & Sons Lumber Company: 2 cars quartered white oak flitches; 1 car 4-4x3½" clear face white oak strips; 2 cars 8-4 No. 1 common hickory; 2 cars 5-4x10' and up plain red oak step plank; 2 cars 6-4x10' and up plain red oak step plank.

The Booker-Cecil Company: 50,000 feet 4-4 firsts and seconds plain red oak; 100,000 feet 4-4 No. 1 common plain red oak; 30,000 feet 4-4 No. 2 common plain red oak; 40,000 feet 4-4 firsts and seconds poplar; 40,000 feet 4-4 sap poplar; 30,000 feet 6-4 firsts and seconds poplar.

Louisville Point Lumber Company: No. 1 common and better poplar, from 5-8 to 4" thick, as well as several cars of firsts and seconds and No. 1 common plain red oak, 5-4, 6-4 and 8-4" thick. This company specializes in soft yellow poplar, band-sawed and well manufactured, and can satisfy the most particular.

Edward L. Davis Lumber Company: 1 car 4-4 firsts and seconds chestnut; 2 cars 4-4 No. 1 common chestnut; 5 cars 8-4 No. 1 common hickory; 5 cars 8-4 No. 2 common hickory; 7 cars 4-4 No. 1 common plain oak; 5 cars 8-4 firsts and seconds plain red oak; 5 cars 8-4 No. 1 common plain red oak; 2 cars 12-4 No. 2 common plain oak, bone dry, excellent widths.

Norman Lumber Company: (mill at Holly Ridge, La.) 1 car 6-4 firsts and seconds poplar; 20,000 feet 3-4 No. 1 common poplar; 80,000 feet 6-4 and 8-4 No. 1 common poplar; 1 car 4-4 common and better chestnut; 1 car each of 4" and 5" No. 1 common poplar bevel siding; 100,000 feet 1" firsts and seconds sap gum; 70,000 feet 1" firsts and seconds red gum; 50,000 feet 1" No. 1 common red gum; 1 car No. 1 common and better sycamore.

The Louisville Veneer Mills offer an unusually attractive proposition to users of figured gum veneers, panels and thin lumber. The company's facilities for obtaining the unique and highly desirable figure in gum makes its service especially valuable

Offers Some Seasonable Specialties Write for Prices

THE EAST

BOSTON NEW YORK PHILADELPHIA

WM. WHITMER & SONS
INCORPORATED

Manufacturers and Wholesalers of All Kinds of

"If Anybody Can, We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg. PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building PITTSBURG, PA.

H. D. WIGGIN
89 STATE STREET BOSTON, MASS.

MANUFACTURER HARDWOOD LUMBER

Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple

Mill at Stone Coal Junction, West Virginia

Stock for Quick Shipment

2 cars 2½, 3 and 4" Common & Better Oak
2 cars 2" No. 2 Common Oak
1 car 2" No. 1 Common and Better Oak
1 car 5/4 No. 1 Common and Better Oak

Inquiries Promptly Answered

DANIEL B. CURLL, REAL ESTATE TRUST BLDG., PHILADELPHIA, PENNA.

Oak Bridge Plank cut to order for QUICK SHIPMENT

WRITE FOR PRICES

J. S. KENT COMPANY PHILADELPHIA

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

WISTAR, UNDERHILL & NIXON

REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.

QUARTERED WHITE OAK

NICE FLAKY STUFF

CHARLES HOLYOKE

141 MILK STREET, BOSTON, MASS.

HARDWOODS

We Know How to fill your orders for all kinds of HARDWOODS, WHITE PINE, YELLOW PINE, SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.

Give us a trial.

THOMAS E. COALE LUMBER COMPANY

FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

W. R. TAYLOR LUMBER CO.

Wholesalers and Manufacturers

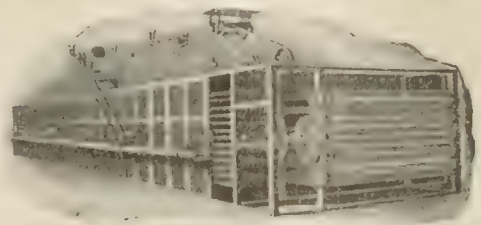
CYPRESS, WHITE PINE, HARDWOODS AND HEMLOCK

1829 Land Title Building, PHILADELPHIA, PA.

PROCTOR VENEER DRYER FIREPROOF
AN UNPARALLELED SUCCESS

No Splitting Nor Checking

No Clogging Nor Adjusting



Recommended by all those who have tried it

THE PHILADELPHIA TEXTILE MACHINERY COMPANY

DEPT. L HANCOCK & SOMERSET STS. PHILA., PA.

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

7,600,000 FEET OF HARDWOOD IN SOUTHWEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry

Room 1003 Harris Trust Bldg., Chicago, Illinois

THE EAST

LEADING MANUFACTURERS AND JOBBERS

R. E. Wood Lumber Company

¶ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.

¶ We own our own stumpage and operate our own mills.

¶ Correspondence solicited and inquiries promptly answered.

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Hardwood Record



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Review and Outlook



General Market Conditions

THE TWO DAYS' HOLIDAY occurring last week undoubtedly had a bearing on general business conditions in local markets throughout the country, as the decision to close down for Friday and Saturday, particularly in the cities, was pretty general. With buying progressing on a normal basis, no particular effect would have been felt, but purchases have undoubtedly been more or less of a parcel nature, for immediate use, and for that reason the taking of two days from a business week contributed to the general effect.

The country's business on the whole shows very little change during the last two weeks, the consideration uppermost in the minds of business men being, as for several weeks past, the proceedings at Washington. With the announcement that the Republican contingent in the Senate is organizing to oppose certain provisions in the tariff and income tax measures now being acted upon, there is further reason for apprehension as the consideration of the measures will undoubtedly continue for a longer period than had been anticipated. Inasmuch as the principal plea of business has been for a speedy settlement of the much-hashed-over tariff arguments, business men generally cannot view with complaisance any movement which will prolong the turmoil, if it can be termed such.

As applied to the lumber business, these national questions have the same bearing which they have on any other branch of business in general, not probably as directly as in some lines, but through indirect means the result is felt distinctly. In addition, the continued unsatisfactory condition of the money market has a distinct bearing on the consumption of forest products inasmuch as they are utilized entirely in constructive work, which, because of its nature, necessarily involves larger expenditures than does the purchase of almost any other raw material. Thus the railroads, because of their inability to secure adequate funds at reasonable rates in many cases, are hesitant in making their usual and in some cases necessary purchases. This is true to a lesser extent in other lines of building, and getting down to the individual, high rates of interest rather retard home building in some instances where it is necessary to borrow money in order to erect new homes.

These conditions, however, in the opinion of those in a position to judge accurately, are not to be prolonged indefintely. It is highly probable that the tariff and currency measures will be acted upon definitely within the course of a month and a half, or maybe a slightly longer period, which, in connection with the unquestionably remarkable prospects for crops, will make a combination which will bring business back to a thoroughly satisfactory state.

As to the lumber business, specifically, the pronounced shortage in hardwoods which was manifest up to a short time ago is easing off somewhat in certain items, although it continues to be apparent in other lines. There is one condition, however, which will have a favorable effect upon production with a tendency to holding it down to normal, and that is the effect of the present season on the working class generally. As a general thing mill and woods-workers in the South are rather disposed at this season of the year to take life rather easily, seeking easier employment in other directions, or laying off altogether for more or less prolonged vacations. The effect of this condition has been felt somewhat in certain sections of the South already, and will undoubtedly have a greater effect as the summer goes on.

The domestic consumption of hardwoods is not only affected by the national conditions suggested above, but in addition by the inventory season which still continues and which certainly has done its share toward retarding the wholesale consumption of hardwood products. There is no marked inactivity in the purchase of furniture, pianos and similar lines; hence with the closing of the mid-season inventories and the finish of the furniture exhibits, furniture manufacturers will have a better idea of "where they are at," and will probably resume their normal purchases. In fact, the general opinion prevalent throughout the trade is that the closing of the summer months will see a satisfactorily increased activity in all purchasing lines. This is unquestionably true of building operations also, although they have for the most part held their own very nicely.

The renewal of hostilities in the Balkan states of Europe has seriously affected export business. In addition to this condition the shipment of export planks has been very heavy up-to-date with the result that there is considerable accumulation on the other side. A great deal of short stock went with the general cargoes, which stock will probably be held up for a long time or sold at a very distinct loss as only during the times when all stock is scarce is the market for short material active. This condition in shorts will also have a marked effect upon the market for the better class of export lumber, and where it arrives in cargoes mixed with the more called-for lengths there will unquestionably be a considerable amount of rejects.

The early indications at the various furniture exhibits in this country are that the buyers are showing a keen interest in the new styles offered, which augurs well for the future.

Summarizing, the situation doesn't offer any features which should cause undue worry, nor does it offer any very satisfactory aspect. The waiting policy seems to have been adopted generally, and, while there has been some little recession of values noted in various markets, it is proving itself to be the safest policy, and is being carried out by the majority of the trade in the hope that the near future will bring conditions back to a normal state.

Clingman's Dome

THE COVER PICTURE of this issue of HARDWOOD RECORD represents an imposing mountain scene in eastern Tennessee, near the North Carolina border. It is known as Clingman's Dome and is one of the splendid summits which crown the heights of the Great Smoky range. Its summit is bare of trees, and having a good soil, it affords fine pasturage for cattle and other stock. The open area is surrounded by a stunted growth of beech, birch, buckeye, and other hardwoods. The scenery among the lofty mountains compares favorably with the finest in this country. Distant valleys and ranges of mountains lie in view at all points of the compass, while the cloud effects are frequently unsurpassed.

Good Business Versus Good Morals

IT IS AN OPEN SECRET that at a recent conference of leading manufacturers of both building woods and hardwoods, there came up the discussion of the policy of the lumber trade press in its devoting both editorial and advertising space to the exploitation of wood substitutes. It is the consensus of opinion that while it might be good business on the part of the lumber newspapers to advertise wood substitutes, it was far from good morals on their part to do so inasmuch as the lumber trade furnished the "sinews of war" for the publication of these papers, and lumbermen should not be asked to support mediums that assisted in exploiting lines detrimental to their interest.

HARDWOOD RECORD for the past ten years has maintained the opinion expressed at this conference on this subject, and has invariably refused to sell advertising space or give editorial exploitation to steel, concrete, composition, or other materials that entered into competition with lumber. This position it will maintain until such time as manufacturers of substitute materials produce a substitute that shall be better than wood for any given purpose. When this is accomplished it is possible that HARDWOOD RECORD may consider the exploitation of these substitutes.

The Box Controversy in New Light

THE INTERSTATE COMMERCE COMMISSION will shortly be in receipt of a complaint filed by the National Classification Committee of Lumber, Wooden Box and Allied Interests, which committee, as is well known, represents the leading manufacturers of box lumber and wooden boxes in the United States and carried the recent Pridham hearings at Los Angeles and Chicago to the satisfactory state at which they arrived recently. The object in filing the new complaint is the belief on the part of the wooden box interests that to allow the Pridham hearing to come to a definite settlement after the submittal of argument in the fall would be to localize the question which is essentially a nation wide problem and must not be solved with any one section of the country as a basis. The Pridham case, as will be remembered, has a bearing merely on east-bound shipments from western territory and if settled on this basis would not affect shipments in other parts of the country and in fact the various other classification territories would then necessarily have to open up the question again, covering the same field of argument. The object is now to incorporate with the arguments in favor of the wooden box interests in the Pridham case specifically the general arguments which would put the railroads all over the country on the defensive where they haul goods packed in fibre containers on the same rates as they do goods packed in wooden containers. The result of the successful decision of such a complaint would be the establishment of a distinct differential in favor of the wooden box and against the substitute container generally throughout the country. The importance of this cannot be overestimated.

The report is current as coming from the Interstate Commerce Commission that that body will probably accept the evidence submitted in the Pridham case in favor of the wooden package as opposed to the fibre package in deciding whether or not it will pass on the general complaint about to be filed. Those in charge of the wooden box side of the Pridham controversy did their work so thoroughly and covered the field throughout the country so well that the arguments submitted do not bear alone on east-bound shipments from western territory, but cover the whole of the country and tend to prove on a general basis rather than on a local basis the superiority of the wooden container. It is to be hoped, and with a reasonable expectation of having the hope realized, that the lumber and wooden box interests will be successful in this, their largest fight.

Forest Products Exposition on Definite Footing

THE NATIONAL LUMBER MANUFACTURERS' ASSOCIATION is preparing to offer within a few days a prospectus of the definite plans which have been worked out by that association in conformity with the resolution passed at its last annual meeting having to do with the establishment of a permanent forest products exposition. Secretary J. E. Rhodes announces that such an exposition will take place in several cities throughout the country in the early part of 1914. The enterprise is backed entirely by the National Lumber Manufacturers' Association and will be an incorporation with capital stock of $25,000, fully paid in. The more intricate details of the plan are still in process of evolution and it will probably be some little time before they are worked out definitely.

It is planned to hold the exposition at the Coliseum in Chicago some time in January, and under the direction of the same corporation various other large cities will have the same exhibit shortly after that.

The main arguments in favor of a forest products exposition have been too fully covered in the lumber trade press during recent years to need reiteration. It can be said, however, that the actual working out of the long-talked-of plan will have an all-important bearing on the lumber business, particularly as a medium between that much misunderstood branch of American industry and the people who buy products of the forest. A vast amount of misinformation has been given out by manufacturers and advocates of wood substitutes, which is all designed to prove to the public that timber is getting scarce anyway and it can not long count on lumber for home and furniture building, and further, that it is dangerous in many places and also offers a very expensive item in home construction. Lumbermen have proved to and among themselves that these insinuations are absolutely false and the exposition will now offer an opportunity of proving it to the people who buy lumber.

In addition to the general exhibit there will be exhibition of all kinds of machinery entering into lumber manufacture. The Forest Service will also have a generous exhibit which will show the various phases of conservation of the forests as applied to perpetuation of supply and the more practical working of forestry methods in connection with actual lumbering operations.

It is announced by the National association that a certain amount of stock will be available for those wishing to subscribe and, aside from the fact that this exposition will ultimately be a mighty good business proposition from a showman's standpoint, it surely seems that it should have every atom of moral and financial support that the lumber trade can give it.

The Steel Car Craze

IN THE MINDS OF THE UNINFORMED there is a belief that the use of steel passenger and sleeping cars constitutes added safety in the transportation of passengers. This form of construction, originally fostered by the steel trust when it became owner of the majority of the stock of the Pullman Company, and became largely interested in the Pennsylvania Company's affairs, is hard to down. On its face it would look as though a solid steel car presented advantages of safety over a steel underframe with wooden upper works and wood interior finish, but the history of railroad wrecks during the last few years presents *prima facie* evidence that the steel underframe and wooden car is much the safer vehicle.

Again, the steel passenger car is a veritable hot-box in hot weather and cannot be kept cool, and it is almost impossible to keep it warm in cold weather. In both extremes of weather it has contributed to serious illness and much discomfort.

Again, the cost of steel car construction is much in excess of the former type. The cost of haulage is immensely increased, and beyond that the very weight requires a track of largely increased strength in order to carry the immense load with even an approximation of safety. It has been demonstrated that in collision steel cars are just as prone to telescope and collapse as the steel underframe type.

The average newspaper with a little knowledge of car construction has been over-zealous in its belief that steel cars insure greater safety to the traveling public. However, high-class technical railroad journals have rarely fallen into this error. Very few of them have ever presented any arguments favorable to the steel cars. It is doubtful if there is a first-class car construction engineer in the country who holds that the steel car in point of safety has any merit over the older type of construction.

The Wall Street Journal of New York, of recent date, seems to be an exception to the general class of newspapers, for it says:

"Now there is a demand for steel cars, but the steel cars will not make for human confidence if we have such passenger wrecks in the East as they have had in the West with steel cars. They burn just as quickly on the inside, and the moment a steel car is struck on a corner, every door and window is wedged, while with a wooden car they can be pried open. In a wooden car you can cut yourself out with the axes and saws that the law compels passenger coaches to carry."

It is high time that the lumber trade, if it has any interest in the furtherance of its own interests, collect full information on the subject of the relative merits of steel car construction and wooden car construction on a steel underframe; put it in logical shape, and present it to every member of Congress.

Today there are a half dozen steel car bills pending at Washington, and while they will not come up for action at this session, undeniably they will at the next regular session of Congress. There will be strong lobby at work to make it obligatory upon railroads to equip their lines with steel cars, and this wood substitute game can easily be headed off by simply presenting the actual facts in the case to every member of the House and Senate. The presentation alone to this body of the evidence of the frailty of steel cars that has been presented in HARDWOOD RECORD during the last year should be sufficient to kill steel car legislation. In this effort the lumber trade can have the support of practically every railroad in the country, save the Pennsylvania line, which is obsessed in the belief that owing to its New York tunnels it is wise to employ steel cars.

First Indications of Car Shortage

THE USUAL CONDITION of rolling stock on the various railroad systems of the country contingent upon the movement of farm produce is just beginning to be apparent in the various agricultural sections of the country. Reports are current that there is some little difficulty already in getting a sufficient number of freight cars to take care of shipments. This rumor is not at all general, but it is not at all unlikely that, with the ripening of the enormous crops in prospect railroads will have their hands full in taking care of their agricultural patrons.

The conditions prevalent in the money market for some time past and the generally hesitant tone of business have rather retarded orders for new railroad equipment and hence motive power and rolling stock are not what they should be in quantity and condition. This will be another factor tending to reduce the number of available freight cars. The usual foresight should be exercised by large purchasers and shippers of commodities to get as much of their inbound and outbound shipment moved prior to the great rush of grain shipments as is consistent with good business policy.

Will Gum Succeed Circassian?

ONE OF THE MOST NOTICEABLE DEVELOPMENTS in the manufacture of high-grade wood goods of late years has been the increasing interest in Circassian walnut products. This beautiful and remarkable wood has come into very wide demand and in a recent report from the government showing consumption of veneers in the United States for 1911 was noted the very material increase in the use of Circassian for that year over the preceding year. This increase has undoubtedly continued up to the present. Considering these facts, the question very naturally arises as to how much Circassian there is left and how long the supply will be adequate to meet the demand. It can be safely stated that the total supply of Circassian walnut is not by any means inexhaustible and in fact it is possible for those conversant with the supply of this wood to see its exhaustion ahead. Furthermore, it is a wood which it is impossible to reproduce as the very character of its figure is the result of a long, slow, difficult growth.

The popularity of the Circassian walnut figure when it began to become so marked attracted the attention of the red gum producers of the country who, where they had marketed red gum locally, had merely sold it as an ordinary domestic wood. The possibility of selecting the highly figured red gum for use in such high-grade articles as were made of Circassian not only became a possibility but a concrete fact. Today we see any amount of high-class furniture and interior finish of all kinds made from red gum of particularly good figure, some of it finished in the natural condition and some finished to imitate Circassian walnut. The results are entirely satisfactory in each case; in fact some interior finish has been produced for notable structures in imitation of Circassian walnut, which actually defies the inspection of experts to detect the imitation.

The possibilities for profit offered by this evolution have been analyzed particularly by producers of red gum veneer. They are paying particular attention to flitching with the idea of producing the most beautiful figure possible from their logs. Slicing is the most common method of manufacture in this instance not only because of the superior physical qualities resulting but because the finest figure is obtained by that process with less contingent waste. It is not at all improbable that the very stumps of red gum cut several years ago can be utilized in this class of manufacture with a distinct profit. Apparently red gum will be the logical successor of Circassian walnut when the supply of that beautiful wood renders its price prohibitive for all but those willing to pay the fancy prices that will unquestionably be demanded.

Who Is Responsible?

A RECENT BULLETIN of the Lumbermen's Underwriting Alliance of Kansas City contains some interesting observations and figures covering recent sawmill fires. The startling assertion is made that of thirty-five sawmill fires occurring during the last eight years, among Alliance members, twenty-nine occurred when sawmills were not operating either at night or on Sundays, and only six occurred when mills were actually in operation. Those fires occurring when only the watchmen were on duty constituted from 82 to 86 per cent of the total number. Further, of the total loss of $1,359,398.34 resulting from total number of sawmill fires, $1,120,793.49 was lost during the time when the mills were down. Fires on Sundays aggregated 29 per cent of the total, whereas one-seventh of the total, the pro rated percentage for one day, would be only 14 per cent.

Also, the loss on Saturday nights was 28 per cent of the total night fires, and should be only 14 per cent if proportionate.

While it is suggested that one of the factors leading to this condition is that owners of the mills postpone the general clean-up until the week-end, and the accumulation of debris of all kinds is then at a maximum, it is probable that because of the greater feeling of freedom which is manifest in all laboring and business circles on Saturday afternoons and Saturday nights, because of the day of rest to follow, there is greater laxity at that time on the part of the watchman, who cannot help but feel the contagion of the feelings which affect other employes. This, of course, is purely a psychological suggestion, but it may be that it has some bearing upon the condition.

As a remedy it might be suggested that more rigid vigilance be insisted upon at night, and in fact, it might be wise to increase the watch service. Additional care should be taken in selecting watchmen to secure those who give evidence that they will be conscientious under all conditions. A man might be a faithful watchman during

the monotony of every-night work during the week, but at the end of the week he naturally also feels the "knock-off," relaxed spirit and probably is not as vigilant as he is during the other six nights.

A Big Idea

IT HAS BEEN SUGGESTED by one of the biggest of the country's lumbermen that the universal working day for woods and sawmill workers be established at eight hours. The suggestion has not apparently met with much support, although it is probable that the lack of support is due to the radical nature of the proposition and to the fact that it comes rather suddenly so that naturally the arguments against it present themselves more forcibly than the altruistic and humanitarian arguments in favor of it.

It is unquestionably a fact that the institution of an eight-hour day throughout the whole of the lumber business of the country would mean a very materially reduced output in the aggregate for the same expense. Taken individually, however, it is doubtful if the added expense to the individual firm would be too great a burden to shoulder. The chief arguments against the proposal have to do with the increased cost of production and, while they apparently offer a very practical side of the proposition, it is certainly true that against them should be weighed judicially the benefits to be derived by sawmill and woods operators. It has further been argued that the life of such workmen is of such a nature that they do not feel the strain of a long day's work in the sawmill and in the woods as do factory operators. This is undoubtedly true, but nevertheless there is probably no other industry which can offer the same monotony of operation which is seen in sawmill work. The very speed with which lumber is produced in itself renders the task ultimately extremely monotonous as close concentration is required throughout the long day's work and when a man has applied himself for ten hours to this kind of labor he is both physically and mentally in need of recreation. To offset the arguments against the proposal as an economic mistake, is advanced the suggestion that the eight-hour working day is something with which the lumber business throughout the country will ultimately be confronted, and that it may just as well voluntarily put into effect such a condition rather than to be forced to adopt it by labor agitators, and further of even greater importance is the greater feeling of co-operation between the employer and employes, which will result from the voluntary adoption of such a regulation.

The suggestion comes from a man who is not recognized as a pure theorist, but who has rather made a distinct success because of his practical business ability and foresight. It should not be talked down merely as a scheme, but should at least be given the earnest consideration from all viewpoints that any big idea warrants.

A Trip of Great Importance

FOURTEEN OF THE DIRECTORS of the Chamber of Commerce of the United States of America have left on a trip which will consume the interval between July 6 and July 27, and will embrace visits to Nebraska, Wyoming, Colorado, Utah, Nevada, Arizona, California, Washington, Montana and North Dakota.

The trip results from the determination of the directors and officers of the Chamber of Commerce to bring the business forces of the Pacific coast in actual touch with the work that has been accomplished by the Chamber of Commerce since its organization in 1912. The rapidity with which the organizations east of the Mississippi have added to their memberships and given their support to the Chamber of Commerce, proves beyond doubt that the business forces of the nation have come to recognize the importance of bringing to a focus the sentiment that has been expressed in local commercial organizations, and having such sentiment brought to bear upon national problems and legislation of governmental improvement, and of higher standards of local work.

Cordial invitations have already been received and indicate that every possible effort will be made along the route to place the directors and officers in close touch with activity and ideas in the different sections. The business interests in general throughout the country should feel a large measure of gratitude to the men handling the actual operations of the national Chamber of Commerce, and can surely feel that a new era is dawning in American business, which is proven by the fact that business men are so realizing the critical nature of present conditions that they are willing to sacrifice time, money and a great deal of individual effort for the purpose of working out the problems of the national Chamber of Commerce successfully. If these men are willing to do this much, the vast business interests covering the whole country should certainly be willing to lend at least their moral and financial support to the movement.

Equitable Classification of Forest Products Possible

ELSEWHERE IN THIS ISSUE of HARDWOOD RECORD appears a report of a recent decision of the Interstate Commerce Commission which suggests the possibilities of the development of a condition which, if it became a fact, would be of immense importance to producers and consumers of the products of the American forests. The decision is the result of a complaint on the part of a spoke manufacturing association as against a certain railroad, and specifically provides that while formerly this road has been hauling finished spokes eastbound at a greater rate than it has hauled similar finished articles, many of which have taken the same rate as the rough lumber from which they were made, the spoke manufacturers will henceforth enjoy the same privileges as the manufacturers of analogous lines of finished wood goods.

This decision records a notable victory for the spoke manufacturers involved but, in addition, has a much broader significance. It makes suggestions—which are merely in the form of suggestions—that would cover classification throughout the country. Specifically, it states that there is altogether too much diversity in that class of schedules and it recommends that a more commonsense basis of classification be used in connection with all finished products as compared to the rough lumber from which they are originally manufactured.

The method which the commission suggests should be pursued in working out this proposition would be to divide the various kinds of forest products shipped through the country into three or more classes. These classes should be comprised first of rough lumber and then in as many classes as is deemed necessary with different finished articles, according to the degree of finish when they are shipped. The pure common sense and the sound logic of this proposal should certainly appeal to all shippers of forest products. If it went into effect it would, while discommoding shippers and carriers considerably for a short time, ultimately result to the vast benefit of both of those interests. It is to be hoped that the suggestion of the Interstate Commerce Commission will ultimately bear fruit.

A Good Indication

THE OPENING DAYS of the Chicago furniture exhibits which formally started the middle of last week but which in reality opened up only Monday of this week would indicate that the furniture buyers are showing rather unusual interest in the new styles of the various kinds of furniture offered. The registration on Monday, July 7, was the largest registration on record for a mid-summer exhibit, the bulk of those in attendance of course being buyers. The semi-annual furniture exhibits in various parts of the country always have a deterring influence on the lumber business, at least as far as various kinds of hardwoods entering into furniture construction are concerned. This is in no wise less true this year than in any preceding year, the reason at all times being that furniture manufacturers do not feel themselves in a position to go ahead very fast with manufacture until they have ascertained definitely just which styles will take. It is impossible at so early a date to analyze even approximately the popularity of the various styles of designs offered, but, from the exhibits already on the floors, there seems to be quite a leaning toward Circassian walnut and mahogany. The Colonial period furniture still is rather prominent in the various exhibits, while the Adam style is also seen rather conspicuously in the higher grade lines. Judging from early suggestions, the present exhibits on the Chicago markets offer a rather favorable indication as to the prospect for furniture purchases for the summer months.

Pert, Pertinent and Impertinent

Thoughts for the Discouraged

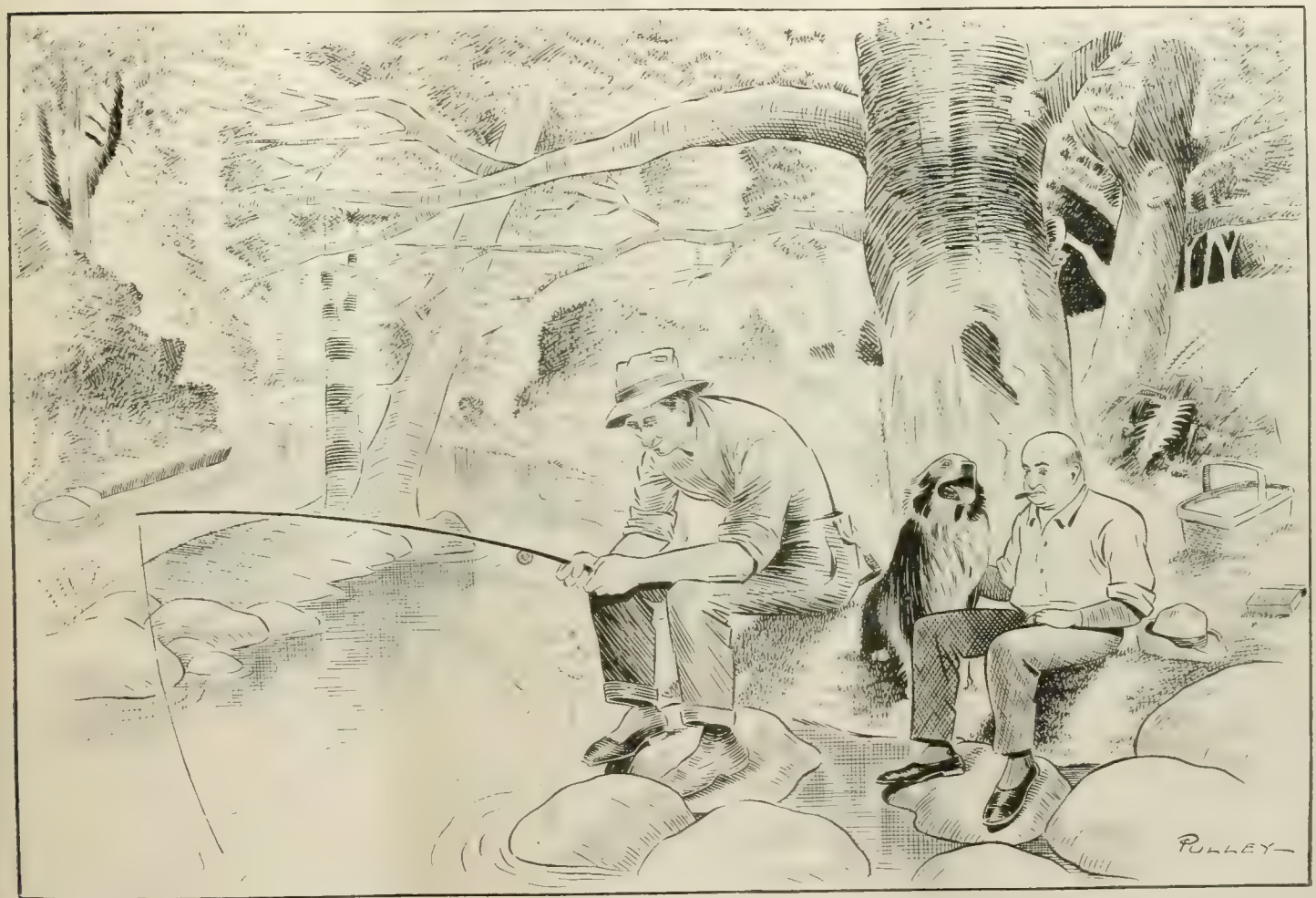
The summer winds is sniffin' round the bloomin' locus' trees;
And the clover in the pasture is a big day fer the bees,
And they been a-swiggin' honey, above board and on the sly,
Tel they stutter in theyr buzzin' and stagger as they fly.
The flicker on the fence-rail 'pears to jest spit on his wings
And roll up his feathers, by the sassy way he sings:
And the hoss-fly is a-whettin'-up his forelegs fer biz,
And the off-mare is a-switchin' all of her tale they is.

You can hear the blackbirds jawin as they foller up the plow
Oh, theyr bound to git theyr brekfast, and theyr not a-carin' how;
So they quarrel in the furries, and they quarrel on the wing—
But theyr peaceabler in pot-pies than any other thing:
And it's when I git my shotgun drawed up in stiddy rest,
She's as full of tribbelation as a yeller-jacket's nest:
And a few shots before dinner, when the sun's a-shinin' right,
Seems to kindo' sorto' sharpen up a feller's appetite!

They's been a heap o' rain, but the sun's out to-day,
And the clouds of the wet spell is all cleared away,
And the woods is all the greener, and the grass is greener still;
It may rain again to-morry, but I don't think it will.
Some says the crops is ruined, and the corn's drownded out,
And propha-sy the wheat will be a failure, without doubt;
But the kind Providence that has never failed us yet,
Will be on hand one't more at the 'leventh hour, I bet!

James Whitcomb Riley.

THE PRESENT SITUATION



The Tourist with the Dog: How is the lumber business nowadays?
The Lumberman Fisherman: I don't know a thing about the lumber business nowadays, and I don't give a rap.

He Learned How It Was Done

Elihu Root tells a story about himself and his efforts to correct the manners of his office boy. One morning the young autocrat came into the office, and, tossing his cap at a hook, exclaimed:

"Say, Mr. Root, there's a ball game down at the park to-day, and I want to go down."

Now the great lawyer was willing that the boy should go, but thought he would teach him a little lesson in good manners.

"James," he said, "that isn't the way to ask a favor. Now you sit down in my chair and I'll show you how to do it properly."

The boy took the office chair, and his employer picked up his cap and stepped outside. He then opened the door softly, and, holding the cap in his hand, said quietly to the small boy in the big chair:

"Please, sir, there is a ball game at the park to-day; if you can spare me I would like to get away for the afternoon."

In a flash the boy responded:

"Why, certainly, Jimmie; and here is fifty cents to pay your way in."—*Ladies' Home Journal.*

Once Enough

A farmer took out a policy of fire insurance on his barn. After a loss and due proofs, the company came to settle or adjust the loss, but took advantage of its option under the contract to build a new barn.

Subsequently a life insurance company sought to have him insure his life in favor of his wife.

"Oh, no," he said, "you don't catch me a second time. If I'd die, you would come around here and offer to get a new husband for her.—*Chicago Tribune.*

Available Foreign Hardwoods

FOURTH ARTICLE

COMMERCIAL HARDWOODS OF CEYLON

Editor's Note

Following is the fourth of a series of articles on foreign hardwoods available for use in this country. The first article covered hardwoods available in the Central American countries; the second covered hardwoods available in South American countries; the third covered hardwoods of Africa and the fifth will cover hardwoods of Burma and India.

Ceylon is an island of the Indian ocean separated from the peninsula of India by a strait known as the Gulf of Manaar. It has an area of about 24,000 square miles, or a little larger than one-half the size of the state of Pennsylvania. It is generally mountainous except in the north, where the country is a wide plain. The population is approximately 3,000,000, being dense only in the western portion, and in the immediate vicinity of the forests themselves there is very little demand for timber. The government has enormous quantities of timber for which it can find no market locally. In most parts the timber is ready for the axe, and repeated efforts have been made in recent years to ascertain as to whether a trade in timber and firewood could be opened with the ports on the Coromandel coast of India, where the forests are not so extensive as on the Malabar coast.

The government of Ceylon has done a great deal of cruising or stock-taking of its forest resources, and with this information in its possession it is in a position to inform the prospective purchaser what it has to offer. The question that has to be answered is whether the dealers in foreign woods in this country can obtain Ceylon timbers sufficiently cheap to handle them. It is true that certain classes of timber, such as ebony and satinwood, have been introduced a number of years ago into the American markets from Ceylon and a well-established trade has now been developed for these woods. As the consumption of woods is constantly increasing in this country, it is only natural to suppose that these woods will continue to be shipped here and others added to the list. There are a great many other excellent woods in Ceylon which possess special qualities, and a number of these will eventually be introduced into our markets. Of course, the introduction of new timbers becomes harder as the available kinds increase, and often very good woods stand little chance so long as the better known kinds can be procured in quantities sufficiently large to supply the demand. Beyond the favorite woods which will have an extensive use, there are many varieties which may be introduced for special purposes with a restricted sale. Even inferior woods may, with the aid of assiduous advertisement, slowly take their place in the list of commercial timbers.



LOGGING IN CEYLON

Among the woods which are most abundant in Ceylon and possess the requisite properties to be classed with other staple timbers of commerce are the following:

Satinwood (*Chloroxylon swietenia*) is one of the most abundant and best known woods of Ceylon. It is found in the northern and southern, but chiefly in the eastern districts, where it attains a fairly large size and is highly esteemed, being next to calamander wood in value. It is well known in India also, and some of the finest satinwood logs to be found anywhere are obtained in the hills of southern India. The wood is very close-grained, hard, heavy, (about fifty-six pounds per cubic foot), strong, tough, and very durable, but it is said to be liable to contract and expand with the weather. It is light yellow, resembling the West Indian satinwood, takes a very good polish, and is suited for all kinds of ornamental purposes, but is somewhat apt to split. Some of the logs are flowered or feathered, and when polished the wood is very beautiful. While the wood is excellent for pieces of agricultural implements, it is too expensive, and is now imported chiefly from England in small quantities for special articles of ornamental work. It makes very beautiful walking sticks.

Chittagong wood (*Chickrassia tabularis*) is a tall tree often from sixty to eighty feet to the first branches and sometimes nearly three feet in diameter. The wood has been imported into England for some years, where it is used in making furniture. The wood is exploited in parts of India, where it passes currently under the general name of cedar and bastard cedar. It is so-called because the wood has a cedar-like odor. The wood is light colored, close-grained, and elegantly veined, but is apt to warp during the season of hot land winds in the tropics. It is moderately hard, rather light in weight (about twenty-eight pounds per cubic foot), strong, tough, very durable, and takes a very good polish, having a satiny lustre. This wood was used in the palace of one of the Kandyan kings, and is said to have lasted for several hundred years.

Trincomalee (*Berrya ammonilla*) is considered one of the most important timber trees in the island, and the wood is exported in large quantities to India, where this species is not found. The wood resembles the ash in color and is highly esteemed for its lightness, strength, and toughness, and is, therefore, the most useful wood in Ceylon for naval purposes. The tree grows straight from twenty to forty feet and from one to three feet in diameter, and can be obtained in sufficient size for all purposes. It is considered superior to any other wood for capstan bars, cross and trussel trees, cask staves, battens for yards, fishes for masts, and for boat-building; it is also employed for carts, wagons, and house-building, and is the best wood for oil casks.

Tulip tree (*Thespesia populnea*) is the best known tree of the island. It grows naturally along the seashore, where the trees attain a height of from fifty to sixty feet. It is planted very extensively for avenues and shade generally. It yields, when mature, very strong, hard, heavy, durable timber, with a color like mahogany. This excellent wood is used for chairs, gunstocks, felloes, naves, panels of



A FOREST SCENE IN EASTERN CEYLON



POOR TREES IN MIXTURE WITH VALUABLE SPECIES

carriages, and in some parts of the East is used in house-building. This tree is also found in the West Indies, and the wood is imported into this country for special uses. It is becoming scarce in tropical America, and the future source of supply may come principally from the East.

Blue wood or mahoe *(Paritium tiliaceum)* is a tree that grows in all tropical countries and produces the mahoe of commerce in the West Indies; in the trade in this country it is often called blue wood, for it is one of the few blue woods of the world. In Ceylon, where timber is abundant, this wood is used chiefly for fences, but in the West Indies it is highly esteemed, and usually brings a fancy price where it can be brought to the market. In Cuba the best mahoe in the accessible regions has been cut. The wood is hard, heavy, and very strong. It is used chiefly for making fancy furniture, as it takes a fine polish, which it retains. The inner bark yields a very valuable fiber.

Bastard cedar (*Guazuma tomentosa*) is a tree which is also native of the tropical America, where it is called West Indian elm. The wood is rather coarse-grained, but is much used in making furniture in Ceylon and India. In the West Indies this wood is used in house-building and for making farm implements, because the wood is very durable.

Wild orange wood (*Murraya exotica*) is a small tree, but produces the toughest wood of Ceylon. The sapwood is thick and nearly orange colored, and the heartwood is dark brown, often turning nearly black. The sapwood is the portion which will perhaps claim the attention of the timber trade in a small way, as a substitute for the true orange wood for making tooth picks, manicuring sticks, walking sticks, and backs of brushes, etc. The wood is abundant also in the Philippine Islands and may soon find its way into the American markets.

Poon (*Calophyllum inophyllum*) is abundant in other parts of the East. It is mentioned here because it is one of the woods which occasionally enter our markets, as a mahogany substitute. A closely allied species (*C. tomentosum*), found chiefly in the interior forests, produces a gigantic tree and very beautiful wood that is highly esteemed by the cabinet maker. The wood is hard, reddish, tough, strong, and is much used for the arms of outriggers and ship's blocks.

Loonvomidella is the Cingalese name applied to a tree (*Melia composita*) closely related to our chinaberry tree. It is a quick-growing tree, yielding a reddish-brown or orange-colored wood. It is close and even-grained, light (about forty-five pounds per cubic foot), somewhat soft, but takes a very good polish, and is very durable. It is used extensively for tea boxes, house-building and furniture making.

The *Carallia integerrima* is the botanical name of a tree closely related to our mangrove and is one of the most common trees of Ceylon, especially on the West coast, where it is planted in the cinnamon gardens. The wood is of a reddish color, very ornamental, being prettily marked with lighter wavy lines; it is tough, but is said not to be durable. It is, however, much used for furniture, fittings, etc. The wood is of such a distinct character in its light-colored wavy lines, that it would no doubt make a suitable substitute for a good many of the cabinet woods now in use in this country.

Siris (*Accacia lebbek*) is a large tree widely distributed throughout the tropics. It is found in the West Indies and its wood is occasionally shipped into this country. The heartwood is very hard, of a dark-brown color, mottled, with deeper colored longitudinal streaks. It is very durable, seasons and works well, and takes a good polish, and is used for furniture, picture frames, building purposes, naves of wheels, pestles, mortars, sugar-cane crushers and boats.

The ebony forms the bulk of the timber trade of Ceylon. There are a great many species, all of which are more or less important. In the trade practically all of the species of *Diospyros* are known as ebony. The principal ones are following:

Diospyros embryopteris. In Ceylon this tree is converted into masts and the native considers it the best sort of all jungle wood for that purpose. It is also used for house building.

D. cordifolia yields a hard, heavy wood with a dark-brown color, very strong, but difficult to work.

D. sylvatica has a whitish wood used for fancy work.

D. toposia is a middle-sized tree chiefly in the damp forests. The wood is used for fancy cabinet work.

D. quesita produces the most valuable of the timber known as calamander wood, so much esteemed for ornamental cabinet work.

D. ebenum is the tree which produces the wood originally shipped to England as ebony. There are many other species of this extensive genus which yield a hard, black wood, known under comprehensive trade name, ebony.

From sifting the subject of sawdust and wood flour it looks like we are going to develop some trade in various lines for this waste product.

If there were no ups and downs in the lumber trade, the business would be too dull and uninteresting to long engage a man of brains.

Sometimes there may be more good material in a crooked log than in a crooked man—and easier to realize upon.

The good listener gains more knowledge as he goes along than the glib talker, and more friends, too.

The right kind of compensation laws are good things for the employer as well as the employe, and they are cheaper to follow and work by than this matter of fighting with lawyers.

"By-products" is getting to be a sort of by-word that means a whole lot more than it used to to the lumbering fraternity.

The smooth-running tongue has its uses, but it is not an universal substitute for a well-ordered brain.

At times consistency looks more like a fickle jade than a rare jewel. For instance, while lumbermen are naturally fighting for the shingle and opposing the extension of city fire limits, there are not only many of them who live under other roofs than shingles from preference, and many mills covered with other roofing, but some millmen are using steel and concrete instead of lumber for their own construction.



Improving the Small Mill Product



SECOND PAPER

In the first article on this subject the matter of manufacturing in the small mill was discussed. Now assuming that due care has been taken to put the saws and the mills in such shape that the work of manufacture will be properly done, let us take up the matter of working the logs and sorting and caring for the stock so as to improve the product and make it worth more to the millman, as well as easier to market.

The greater part of the work of the average small hardwood mill is done on bill stuff, orders for timber, car material and other dimensions for which the order and specifications are in hand before the cutting is done. Indeed quite commonly the orders are in hand before the logs are cut, the timber selecting in the woods and the log cutting being in conformity with the requirements of the order.

The sawyer in the small mill cutting bill stuff has his eye mainly on the bills or orders before him to be gotten out. These are the main source of revenue and the cutting and shipping out is done in rapid succession. There are trimmings in squaring up logs, some cull pieces now and then, and occasionally a log that will not make what it was intended for and must be converted into something else. All these things are given but passing or incidental attention and are what might be termed unsought and unwelcome products of the small mill.

It is these very products, which are often sadly neglected and badly abused after cutting in the small mill, that may be made into a valuable source of revenue. The common side products of the small mill cutting oak bill stuff is made up of one inch and two inch boards of varying lengths and widths. There may occasionally be some thicker boards or flitches and cull pieces of timber or car stock that accumulate on the yard. The heaviest accumulation, however, is in one inch and two inch boards of almost every conceivable length—from seven feet up to twenty-four feet and occasionally longer.

Because these are side products and are not expected to bring in immediate returns they are too often carelessly dumped on one side of the lumber track and left to warp, twist and crack, and become sap-stained until they have but very little market value no matter what may have been their value in the first place.

The trouble here is that the small millman has always operated too much on a hand-to-mouth basis. He has never properly embraced the idea of accumulating and yarding a stock of lumber to dry thoroughly and to be properly sorted and graded before shipping. His mind and energies have been centered on cutting special bill stock, shipping it out immediately and getting prompt returns. He can do this with a limited capital and he looks so persistently toward this part of the business for his living that he has continued to overlook many opportunities for the profit by improving and caring for the lumber produced incident to the making of bill stuff. The first great need of the average small mill in this connection is to carefully assort for length and thickness and pile boards and planks while they are fresh from the saw. What is meant by this is not merely to pile them up any old way with sticks between to let through some air. They should be carefully piled on well prepared foundations so that they will dry out in seasoning bright and clear and comparatively free from checks and warping.

Caring for this product is perhaps the one thing of greatest importance and it may be properly classed as improving the product. There is another improvement which is deserving of a little attention here. To properly comprehend this idea the small millman should carefully study grading rules and specifications and also the sizes and specifications of agricultural implement wood and other high-grade dimension stock which brings special prices. With all these properly in mind there are before the small millman many opportunities to improve the value of his side product by proper ripping and trimming to fit it for specific sizes as well as to improve the general grade.

Take, for example, the two inch plank, a common side product of bill stuff. Generally this is considered a common product and it is either sold locally at a low price or shipped out in a conglomerate mass with no expectation of realizing any more than a low-grade lumber price from it.

A fair percentage of this side stock is low grade, too, but while this is a fact, it is also true that there is a fair percentage of clear stock obtainable. Some of the boards are clear or practically clear as they are made in the regular way; others can be reduced to clear stock by a little special trimming and edging, and still others that are of not much value because of one or two bad defects may be reduced to clear dimension of smaller size.

The theory of getting clear dimension stock out of these siding planks is one that the writer has seen put into practice by taking an item of 2x4x8 to 12 feet to be used for wagon poles and agricultural implements. The sawyer was instructed to get as many of these as he could from his trimmings, and they were sorted out and piled with the result that more was realized from this one item than from all the rest of the two-inch siding accumulated in cutting such bill stuff.

That experiment was tried and worked out successfully at a time when there was very little demand for clear dimension stock aside from the requirements of wagon manufacturers. Today there is a steadily enlarging demand for dimension stock in many sizes, and the small millman manufacturing oak should be able to find a market for enough sizes to make a splendid working basis for refining lots of his trimmings in making bill stock. This would simply utilize a certain percentage of his side product. The balance of it should be sorted and carefully piled for drying so that when enough has accumulated to market and ship, it may not have deteriorated in value.

It is not only the trimmings which may be worked into special dimension and refined and sorted for specific grade but the cull timber of pieces and bill stuff may be handled in the same way. To do this right the inspection should be so thorough in the mill where the stock is produced that but very few culls will accumulate in the yards. It is the accumulation of culls out on the yards that is a nuisance and waste. They make a sort of junk pile and are seldom of any material value and it is too much trouble and expense to take them back into the mill for reworking. Most of this accumulation of cull pieces on the yard can be avoided by a rigid inspection in the mill. The sawyer and block setter, by being provided with specifications for the bill stuff and required to do it, should be able to inspect the stuff as it is manufactured and do the work so well that there will be but few culls out on the yard. If they are not able to do this it would be better to put an inspector just back of the saw in the mill and have the inspection made rigid there instead of at the shipping point. The advantage of this method is that the cull pieces are then convenient for reworking and can be converted into plank or special dimension stock while they are fresh and green and the full measure of their value gotten out of them.

In this matter of improving the product of the small mill, in judging timber and sorting and refining stock, it is pretty much the same as improving the product by looking after the mechanical equipment of the mill itself. It is a matter of careful attention to detail rather than a matter requiring any special skill other than that which is available at all times among practical operators. It is simply a matter of care, of diligence, of vigilance, of keeping everlastingly at it with the idea all the time of getting the best product and selling it for the best possible price. T. C. J.

Lots of the trouble with poorly manufactured lumber really has its origin in the office from which the purchases of machines and supplies are made instead of in the filing room or mill.

Transportation of Lumber

FIRST ARTICLE

CHANGING CONDITIONS

Editor's Note

This is the first of a series of four articles on the transportation of lumber. Succeeding articles will cover some of the shipping items, costs, and possible permanency.

The transportation of lumber in the United States has been different from the transportation of nearly all other important commodities. The conditions have changed oftener and to a greater extent. From the standpoint of the carriers the business has been more unstable and has required more frequent readjustment of transportation facilities than is the case of any other large business. This has had much to do in keeping freight rates in an unsatisfactory condition, because carriers have never been able to figure on long-time business in a particular district. As the forests of one region have been cut out, the lumberman has moved on to another. This has not been particularly difficult for the lumberman to do, for he was not necessitated to leave much equipment behind, but it was a more serious matter with transportation companies, particularly those engaged in land carriage. Railroads cannot move from one region to another, as sawmills can. The road which was built to carry the lumber of a certain region to market is left with no lumber to carry when the mills cut out and move on.

The whole history of the lumber business in the United States is a series of repetition of changes and exhaustion of old supply and removals to new regions. The railroads have always been obliged to face that condition. As far as carrying lumber is concerned, they have never been able to calculate on anything else. This has not been the case with most other commodities which furnish large amounts of freight. A brief survey of the field will emphasize that fact.

The railroad tonnage of this country may be grouped in seven classes. The lines separating the classes cannot be sharply drawn, for there are frequent overlappings; but the groups are fairly well defined in a general way, and embrace all the freight carried by railroads. The classification holds equally true for water transportation, but unfortunately that kind of transportation does not amount to a great deal in the country's inland commerce, though it is large in some restricted localities. Freight commodities may be grouped as agricultural, animal, mineral, forest products, manufactured products, merchandise, and miscellaneous. Some persons may take exceptions to this classification, but it is the one preferred by writers on economics, and it would be more difficult to improve upon it than might be supposed at first glance. It was the classification used by the United States census in 1890.

The total freight carried by all the railroads in the United States in 1909 amounted to 1,556,559,741 tons. The following list shows the proportionate amount of each one of the seven groups, for three decades:

	1909 Pct. of Whole.	1900 Pct. of Whole.	1890 Pct. of Whole.
Mineral products	55.69	49.88	42.40
Manufactured products	13.15	14.10	12.48
Forest products	11.75	10.41	9.96
Agricultural products	8.92	12.73	13.51
Merchandise	4.11	4.44	4.65
Miscellaneous	3.98	5.06	12.87
Animal products	2.49	3.38	4.13

The foregoing table shows the proportionate amount carried of each group, not the regions where the freight originated. It is a well-known fact that the source of lumber tonnage has changed from region to region more than any other group of commodities. This holds true of the period prior to 1890 as well as later; it goes back, in fact, to the beginning of railroad traffic in this country. Where coal and iron mines are developed, they remain—not a few years or a few decades, as with logging operations and sawmills, but for generations and centuries. The railroad that is built to carry the product of mines can depend on that business as far into the future as any man can see. The road constructed to carry lumber out of a region sees the end of that great business at no distant date. New mines may open in other regions, though the old mines do not close; but it has been the history of the lumber business in this country that no extensive new timber regions have been developed until old ones have become depleted.

Agriculture is permanent. Fields furnish year after year, and generation after generation, the freight which transportation companies must have. The apple orchards and wheat fields in the valley of Virginia, which furnished freight to the Baltimore & Ohio railroad in 1835 are furnishing the same kinds of freight to the same railroad today, and in ever-increasing quantities; but the sawmills in that region which furnished some freight then, disappeared, so long ago that nobody remembers them. That has been the history in all old farming regions. The supply of farm tonnage for the transportation companies is as constant as the procession of the equinoxes; but the forest tonnage, with rare exceptions, dwindles to a vanishing point in a few decades.

The freight supplied by manufacturers may change somewhat as to items, but in quantity it is as permanent, or nearly as permanent, as farm products. Local disturbances of economic conditions may lessen the output of manufacturers of towns or small districts; but this does not occur generally in large regions. The carrying company can always look confidently ahead and feel sure that it will have something to carry. The same holds true with the transportation of the large class of commodities grouped as merchandise. Demand is constant, supply is dependable, and railroads can count on the business.

It has been very different with the transportation of forest products. The history of changes, of shifting centers of supply, of depletion of resources, of rise and decline, grows monotonous by repetition. It is the same story over and over, with the change of a few dates and localities. Three-quarters of a century ago De Tocqueville wrote that American settlements were moving west at an average rate of seventeen miles a year. That might do as an average, but it is too exact to hold true in particular cases. However, it is not far out of the way as a statement of the average rate at which the lumber business changed centers. In 1885, Cattaraugus County, New York, was rafting white pine lumber to New Orleans and selling it at $40 a thousand. In 1905, Louisiana was shipping longleaf pine lumber by rail to northeastern states, and Cattaraugus County was getting its share, and the price was not far from $40. Here, as an individual instance, is seen a complete reversal of lumber shipments in a hundred years. It is a good example of what may be described as back-tracking lumber—shipping it out of a region at one time, and replacing it later by other lumber shipped in. That has been a very common practice in this country, and it is going on as industriously today as ever in the past; and it is not necessary to go back a hundred years to find concrete examples.

It has been the rule pretty generally in the lumber business that a region with an abundance of timber cuts and ships it to the four quarters of the compass, and keeps on cutting and shipping as long as it has any. A few years later the region becomes a buyer instead of a seller. These instances have been many, on scales both small and large, and they are precisely similar to the business foresight of the West Virginia farmer who, in the fall of the year when he had plenty of corn, hauled it twenty-five miles and sold it at fifty cents a bushel, and a few months later bought corn at a dollar a bushel and hauled it twenty-five miles back home to take the place of what he had sold.

In Michigan, the custom of shipping lumber on the back-track is illustrated with as much point as can be found anywhere in the country, though nearly all the older settled regions are now importing lumber from other states to take the place of what was

formerly shipped out. It is well known that Michigan once supplied most other parts of the country with white pine, which was then in greater use than any other softwood of this country, and probably more at certain periods than all others combined. Michigan sold and shipped its pine, and now soft woods from near and far—chiefly from far—are being back-tracked into Michigan to meet home needs. The former largest seller is now a large buyer. The imports of lumber into that state in 1911 amounted to 487,000,000 feet, and some of it was shipped 2,000 miles, and most of it more than 1,000. Some of the largest items of lumber on the back-track into Michigan in 1911, all of which were softwoods and chiefly to take the place of white pine, are shown as follows:

Species.	Region of Growth.	Feet.	Ave. Cost.
Longleaf Pine	South	35,000,000	$25.29
Shortleaf Pine	South	22,000,000	27.20
Cypress	South	12,000,000	35.10
Douglas Fir	West	5,000,000	37.60
Sugar Pine	West	2,500,000	42.91
Sitka Spruce	West	2,500,000	33.79
Redwood	West	1,500,000	47.81
Western Hemlock	West	1,500,000	25.00
Western Yellow Pine	West	1,500,000	32.00
Idaho White Pine	West	1,400,000	39.08

The history of lumber shipments to and from the lake region is a remarkable story of changes in conditions. It is a repetition of the history of earlier lumber operations and transactions in other regions; but the changes in the Lake States are more easily studied and the effects are more clearly seen.

Exact statistics of shipments from the Lake States are meager for the early years. In fact, they were incomplete until about 1901; but some instructive figures for earlier years are obtainable. Receipts of lumber at all lake ports in 1889, as far as records show, amounted to 6,857,275 tons. These shipments were by water and included no lumber moved by rail. This tonnage was equivalent to 3,534,639,350 feet. The exact average weight was 514 feet of lumber to one ton. Twenty years later, 1909, the water transportation of lumber in the same region had fallen to 1,155,765,000 feet. Figures seem to be unavailable in published reports for all intervening years, but for certain years the transportation of lumber on the lakes was as follows:

	Feet.
1889	3,534,639,350
1905	1,854,875,000
1906	1,807,510,000
1907	1,380,284,000
1909	1,155,765,000
1910	1,207,792,000

The decline in water shipments from the Lake States was due, in part, to falling off in general lumber supply in that region; but it was more directly due to the cutting away of forests near navigable waters. The mills moved farther toward the interior, boats could no longer get cargoes, and the lumber went to market by all-rail routes instead all-water or part rail and part water, as formerly. In 1910 the cut of lumber in the three Lake States was as follows:

	Feet.
Michigan	1,681,081,000
Minnesota	1,457,734,000
Wisconsin	1,891,291,000
Total	5,030,106,000

Less than one-fourth of the 1910 lumber cut in those states was shipped by water in 1910. It was about one-third of that shipped twenty-two years before.

This change is typical of all interior water transportation of lumber in the United States. Forests are depleted year by year back from the banks of navigable streams, and boats which formerly had lumber trade fail to get it now; but boats which loaded at certain points with coal, iron, farm products, or merchandise ten or twenty years ago are still loading at the same places, and in most cases the tonnage of these products increases year after year.

It is thus apparent that water transportation of lumber is no more certain than rail transportation; that constant shifting of sources of supply makes it impossible for carrying companies to count on tonnage very far in the future from any particular forest region; and that profitable business in transporting this commodity during one decade is no guarantee that similar business will be had the next decade. A road which is built to carry forest products from a certain region to a certain market will at length find the lumber depleted, and the road will then be fortunate if it finds itself in position to take advantage of the back-track trade—hauling lumber into the region whence it was formerly hauled out. Some of the roads leading south and west from the Lake States are now doing this. Roads which once carried billions of feet of white pine west toward the Rocky Mountains are now carrying millions of feet of Douglas fir, Sitka spruce, and sugar pine from the Pacific coast, eastward into the Lake States. Roads which carried white pine to regions south of the Ohio river are now carrying longleaf and shortleaf pine in the opposite direction and into the former white pine territory. Railroads which had enormous traffic in Lake States lumber going eastward, from twenty to forty years ago, have little lumber to carry the other way now, because no new timber resources remained in the east to be opened.

Lumbering in the Philippines

The lumber industry in the Philippines is still in its infancy, although now the old primitive methods of logging and milling are giving way to the American occupation, and at present about sixty or more sawmills are in operation on the island. There are not many band mills cutting over 100,000 feet per day. Native labor is cheap and under a high-grade supervision, lumbermen there are able to get cheaper labor cost with the same results than in the United States. A competent American woods boss, put in charge of logging operations, is eliminating the old Filipino boss who could not seem to work in harmony with his own kind of labor. Now, under American supervision, the Filipinos are anxious to make good and are studying the problems of logging and consequently developing very efficient logging crews. The same is true of mill labor.

The transportation of lumber still remains an item of large expense in marketing lumber, but in this there is room for reduction by building one's own fleet of freight steamers.

There is great room for modern equipment. Among the logging problems are steep slopes, heavily timbered to the water line. The timber next to the salt water can be handled by the pull boat system used in the cypress swamps of the South. This method can also handle the logging proposition in the mangrove swamps for piling and timber, while the steep slopes of the interior can be handled by cableways, such as the product of the Lidgerwood Manufacturing Company, New York. Timber slides are not used as yet, but offer a field.

Every lumber enterprise in the Philippines that is being done along good business lines is today making large profits, and the profits so derived are being used to their utmost limit in extending and enlarging equipment and operations. Prospective investors are finding a safe investment when they go in and study the methods of men of past experience in Philippine lumbering before attempting to log and manufacture.

The Philippine Bureau of Forestry has long forseen that competition coming in will lower profits and so it is paving the way for a future export trade with China especially. So far the local manufacturers are unable to satisfy a growing demand from customers in the United States, and the next few years should be marked by a rapid advance leading to the exclusion of all foreign timber from the Philippine market.

The day of the small operator is passing, and the large operator will be the more prominent of the two in the islands. It will be a matter for the lumbermen to adjust themselves to a decrease of profits as new lumbermen come in. The United States is already familiar with the most important species of Philippine lumber and thus the newcomers can take advantage of a permanent export trade at once.

The market today for Philippine mahogany, hardwoods and salt-water piling (resisting the teredo) is practically in the hands of the lumbermen themselves, for they can nowhere at the present time keep pace with the demand.

Exploitation is now just beginning. The future of the lumber industry in the Philippines is very promising.

Wood-Using Industries of Virginia

A valuable and interesting report of Virginia's wood-using industries has been published by the American Forestry Association. The report was written by Roger E. Simmons, statistician in the United States Forest Service. He has compiled several similar reports, among them being those for North Carolina, Kentucky, Maine, and New Hampshire.

The figures for Virginia contain much of interest. The state produces a large amount of lumber yearly, though it has been settled longer than any other state in the Union, except Florida, and for nearly 300 years it has been a leading agricultural region. It might be supposed that its forests would have been exhausted long ago. Such is far from the case. It supplies more than 2,000,000,000 feet of lumber yearly, besides other forest products amounting to 1,000,000,000 more. A large part of this is converted into manufactured products. Only five states exceed Virginia in the quantity of wood annually used in factories. Those ranking above it are Illinois, Arkansas, Louisiana, Michigan, and Wisconsin. It is doubtful if any state equals Virginia in number of sawmills. Many of these mills are at work on second-growth timber that has taken possession of abandoned plantations. In this state may be studied to better advantage than nearly anywhere else the recuperative power of forests when they have a chance. Few forested regions are as free from fire injury as Virginia, and young trees have a chance to reach commercial size.

The table which follows shows the quantity of wood further manufactured in Virginia after it leaves the sawmills.

WOODS USED IN VIRGINIA

Kind of wood	Quantity used annually. Feet B. M	Per cent.	Average cost per 1,000 ft	Total cost f. o. b factory.
Loblolly pine	389,257,088	43.50	$12.77	$4,961,017.96
Shortleaf pine	182,369,615	20.40	13.26	2,417,980.10
Longleaf pine	74,762,206	8.40	20.26	1,515,553.23
Scrub pine	44,243,500	4.90	10.99	486,526.86
White oak	35,467,028	4.00	22.05	782,144.11
Red gum	31,594,290	3.50	13.31	420,462.58
Yellow poplar	27,848,547	3.10	18.58	517,294.25
Red oak	19,934,500	2.20	20.75	413,284.50
Cotton gum (tupelo)	14,951,000	1.70	9.65	144,927.50
White pine	13,954,529	1.60	27.00	376,403.04
Cypress	8,985,518	1.10	26.07	234,275.24
White cedar	8,290,113	.90	18.68	154,916.15
Hickory	7,666,245	.90	31.38	240,612.80
Chestnut	7,115,896	.80	13.43	95,576.95
Black gum	6,444,190	.70	11.47	81,277.75
Ash	4,182,403	.50	24.30	101,628.93
Locust	2,279,000	.20	22.90	52,200.00
Sugar maple	2,236,350	.30	20.62	46,107.25
Beech	1,946,000	.20	17.98	34,995.50
Sycamore	1,769,000	.20	24.83	50,580.00
Basswood	1,591,900	.20	18.80	29,934.50
Black oak	1,065,000	.10	19.18	20,430.00
Sweet birch	986,000	.10	32.28	31,826.00
Spruce	952,025	.10	24.07	22,922.65
Cottonwood	754,026	*	22.62	17,161.04
Hemlock	734,000	*	11.63	8,535.00
Dogwood	733,400	*	14.18	10,392.40
Douglas fir	609,736	*	58.08	35,427.87
Mahogany	426,358	*	146.86	62,364.00
Slippery (rock) elm	292,581	*	33.23	9,704.28
Black walnut	277,300	*	35.85	9,930.00
Cucumber	162,000	*	17.40	2,820.00
White (soft) elm	140,000	*	10.14	1,420.00
Cherry	100,326	*	97.40	9,740.86
Buckeye	80,000	*	13.15	1,050.00
Sugar pine	68,000	*	68.38	4,660.00
Red cedar	46,000	*	36.48	1,678.00
Teakwood	44,059	*	199.09	8,771.80
Butternut	17,923	*	51.07	914.30
Persimmon	15,000	*	14.00	210.00
Osage orange	13,000	*	48.00	624.00
Sassafras	12,000	*	32.00	384.00
Silver maple	10,000	*	30.00	300.00
Spanish cedar	5,000	*	120.00	600.00
Western red cedar	5,000	*	50.00	250.00
Rosewood	1,400	*	531.00	708.00
African cedar	1,100	*	138.00	151.80
Silver ava	1,000	*	100.00	100.00
Circassian walnut	350	*	190.60	66.75
Jarra	200	*	200.00	40.00
White mahogany	100	*	100.00	20.00
Philadelphia walnut	100	*	100.00	20.00
Total	894,441,902	100.00	$15.00	$13,420,921.95

*Less than one-tenth of one per cent.

All of this wood is not grown in the state, but that is because Virginia is surrounded by forested regions, and factories near the borders draw from over the lines; but Virginia sends more to other regions than it takes from them.

Virginia has the distinction of using more wood in the manufacture of boxes than any other state. That is due to abundance of good, cheap material, and the region's proximity to markets of many kinds. Truck gardeners are in easy reach of Baltimore, Philadelphia, and New York, and supply early vegetables and fruits. Manufacturers of and dealers in dry goods, hardware and groceries in several of the large eastern cities are furnished with boxes and shipping containers by the Virginia forests.

Though the manufacture of boxes is the largest, it is only one of more than twenty industries in the state. Planing mill products, consisting principally of flooring, ceiling, and siding, are second in importance, and car building is third. The lowest average price for raw material is paid by makers of excelsior, the highest by pattern makers. The table which follows lists the various industries and gives much information concerning material and cost:

SUMMARY BY INDUSTRIES OF WOOD USED IN VIRGINIA ANNUALLY

Industries—	Total feet B. M.	Per cent.	Average cost per 1,000 feet f. o. b. factory.	Total cost f. o. b. factory.	Grown in Va., per cent.
Boxes	413,371,667	46.22	$11.96	$4,944,636.33	60.50
Planing-mill products	223,337,762	24.97	14.71	3,232,026.75	49.70
Cars and locomotives	51,293,031	5.73	17.96	921,168.25	16.29
Sash, doors and general mill work	44,295,940	4.95	24.27	1,075,293.32	55.06
Paving wood blocks and conduits	27,552,000	3.08	17.56	486,585.00	22.20
Furniture	20,207,800	2.26	22.15	447,244.90	70.50
Baskets and fruit and vegetable pkgs.	19,657,330	2.20	13.01	255,713.97	47.95
Vehicles and vehicle parts	17,487,150	1.96	27.30	477,340.63	71.37
Trunks	15,364,661	1.72	14.34	220,232.21	90.03
Ship and boat bldg.	11,138,497	1.25	40.46	449,691.78	10.26
Woodenware, novelties, matches	10,545,000	1.18	16.93	178,575.00	39.06
Excelsior	6,032,000	.67	8.48	51,159.50	100.00
Fencing and gates	6,925,000	.77	12.72	75,492.50	91.84
Insulator pins, etc.	5,875,218	.66	21.06	123,730.36	51.42
Fixtures	3,068,650	.34	37.30	114,352.75	34.12
Handles	2,993,000	.33	21.75	65,093.50	96.66
Agricultural implements	2,404,000	.27	22.18	53,414.50	89.06
Caskets and coffins	1,566,346	.18	17.08	26,534.64	82.59
Poulterers' supplies	647,400	.07	18.34	14,120.00	79.22
Chairs	770,000	.09	17.44	11,282.75	45.94
Shuttles	631,400	.07	13.71	8,647.40	100.00
Tobacco boxes	454,550	.05	21.93	9,992.55	66.00
Patterns	130,800	.01	82.74	10,840.00	16.82
Miscellaneous	8,692,700	.97	19.36	167,753.40	51.02
Totals	894,441,902	100.00	$15.00	$13,420,921.99	54.14

White oak is used for more purposes than any other wood listed. It enters into 131 different articles; while the following woods appear in only one article each: Beech in flooring; African and Spanish cedar in cigar boxes; prima vera in Venetian blinds; Osage orange in wagons; persimmon in shuttle blocks; sassafras in furniture, and silver ava and Philippine walnut in porch blinds. Two woods, sugar pine and Douglas fir, come from the Pacific coast.

Almost any millman can make good lumber. The question is really one of whether he will or not—whether he will take the pains to win the prize that labor gains.

Differentiating Between Maples

The maple is widely and abundantly distributed over the hardwood forest areas of the northern hemisphere. It extends south of the equator in the high mountains of Java. Its center of distribution is Asia and Japan. There are at least seventy species of maples in the world and thirteen occur in the United States.

The most important species are the sycamore maple (*Acer pseudoplatanus*) of Europe, the sugar maple (*Acer saccharum*) of America, and the Indian maple, or daom, (*Acer campbelli*) of India. The sycamore maple, which is seen frequently along our streets, is at its home used extensively in turnery and woodenware, such as trays, rollers, spoons and plates. The Indian maple is a large tree, the wood of which is extensively employed in India for planking and for ordinary tea boxes. The Asiatic and Japanese species are abundant in cultivation for decorative purposes, but are usually small trees of minor importance for their wood. The whole group of maples is largely used for decorative planting and the brilliant foliage of many of the species adds materially to their value for this purpose. This is particularly true of the oriental species and our native red maple.

Of the thirteen American species the following are of more or less importance in the lumber industry: Sugar, hard or rock maple; black maple, red maple, silver maple, Oregon or broadleaf maple, and box elder or ash-leaf maple. There are four kinds on the Pacific slope, but only the Oregon maple reaches large size or possesses wood of merit.

The wood of all maples is diffuse-porous, that is, the pores are scattered throughout the wood instead of collected in rings. The pores are very small to minute, and not distinct without a hand lens. The texture is fine and uniform; there is little contrast between the wood formed early in the season and that produced in the summer. The rays are quite distinct, and in sugar maple particularly some of them are conspicuous on quarter-sawed material.

There is considerable variation in the weight and density of the woods of the various species, so that it is customary to divide them into two groups—hard and soft. The first group includes the sugar and the black maple, the other all the remainder, except the Oregon maple, which is rather intermediate.

The natural durability of maple wood when exposed to decay is poor. When properly treated with antiseptics it becomes valuable for ties and is now coming into common use. Prior to 1908 the number of maple ties manufactured was negligible, but in that year 151,000 were reported by the railroads. In 1909 the number was a little larger—158,000; in 1910 it was 793,000, and in 1911 a total of 1,189,000 maple ties were purchased. This rapid increase is due mainly to the fact that with an effective preservative treatment ties cut from this class of timber will last as long as, or even longer than, untreated ties made from the more expensive standard tie woods, such as white oak and longleaf pine. Maple wood lends itself quite readily to impregnation, which is an important factor in reducing the expense of treatment. Sugar maple in particular is highly resistant to abrasion and wear of all kinds.

In 1910 a total of over a billion feet of maple lumber was manufactured in thirty-six states, including Oregon, Washington, and every state east of Colorado, except North Dakota, South Dakota and Nebraska. The annual production is remarkably uniform, and though less than in 1909 the quantity reported in 1910 was greater than in any earlier year. Michigan has, for many years, ranked first in maple lumber production, about four-fifths of the quantity reported being cut in the lower peninsula. Wisconsin, Pennsylvania, West Virginia and New York, in the order named, followed Michigan in 1910, and together produced almost thirty-two per cent of the total output.

Maple is little used in tight cooperage. In slack cooperage, however, it ranked sixth in 1910 in number of staves (79,113,000) and fourth in the number of sets of heading produced (12,628,000). The number of staves reported for 1910 was 54,140,000 less than for 1909, about 45,600,000 less than for 1908, and 18,200,000 less than for 1907. Maple staves were manufactured principally in Michigan and Pennsylvania. The amount of heading manufactured annually has remained fairly constant during the same years. In Canada maple supplies about one-twentieth of the slack staves manufactured.

In the production of veneer maple ranked third in 1910 with a total of 39,471,000 feet, log scale, being a close second to yellow pine but entirely outclassed by red gum with its cut of 158,157,000. feet. The importance of maple in this business is growing quite rapidly, judging from the returns for the three years previous. Considerable sugar maple veneer is used for exterior finish for furniture.

Maple is one of the three principal hardwoods used in destructive distillation. Charcoal, wood alcohol and gray acetate of lime are the leading products. Usually a cord of wood furnishes from forty-five to fifty-two bushels of charcoal and distillates yielding from seven to ten gallons of wood alcohol and from 130 to 200 pounds of acetate of lime. The total amount of beech, birch and maple used for this purpose was, in 1910, 1,258,000 cords, but the proportion of maple is not known. Wood distillation is a growing industry.

The wood of the hard maples is extensively used for other purposes than those mentioned above. In house construction it provides flooring, ceiling, paneling and stair work. In car and boat building it is much used for finish, particularly in street cars, and very frequently in the form of veneer; also the keels of boats and ships. It is extensively employed in the manufacture of implements and machinery. In turnery it is one of the most common woods for shoe lasts, shoe trees, shoe pegs, wood type, tool handles, broom handles, mallets, saddle trees, pulleys, carving, school apparatus, wood strains and tooth picks. Furniture made of it includes bed room suites, chairs, tables, stands, cabinets, school desks and benches. The bird's-eye forms are highly valued for furniture and cabinet work. It fills a valuable place in the manufacture of athletic and sporting goods, such as ten pins, bowling alleys, billiard cues, hockey sticks, croquet mallets and balls; also in musical instruments. As a fuel wood hard maple has few equals, ranking close to hickory in this respect.

Soft maple wood lacks much of the figure and strength of the hard kinds, but is employed for some of the same purposes. Its principal uses are for boxes, crates, baskets, fixtures, furniture, flooring, interior finish, woodenware, broom handles, shelving, cores for veneers, excelsior and pulp.

The sap of the hard maples is the source of the very important by-product, maple sugar and syrup, worth over $5,000,000 in 1909. The sugar maple (*Acer saccharum*) is the most important tree of the group, though trees of the other species contribute something. The industry is almost entirely confined to the northeastern part of the United States and southeastern Canada, the three most important states being New York, Ohio and Vermont.

Sugar maple (*Acer saccharum*), also commonly known as hard maple, rock maple and sugar tree, is widely and generally distributed throughout the eastern half of the United States, but is most important in the North. When mature it is a large tree, reaching in the forest a height of 100 to 120 feet, a diameter of 3 to 4 feet, and not infrequently a clear length of 60 to 70 feet. The wood is hard and heavy, weighing about 43 pounds per cubic foot, with a specific gravity of .69. It is very strong, stiff, tough, fine and uniform textured, usually straight-grained, readily split, though curly grained and bird's-eye forms are frequently met with. The wood shrinks considerably in seasoning, dries slowly, but does not twist or warp when properly handled. The wood is distinguished from that of other maples (except black) by its greater density, hardness and weight. Part of the rays are comparatively large, being broader in cross section than the pores; on quarter-sawed material they are high, reddish-colored and quite conspicuous. The rays between the large ones are very narrow, mostly only a single

cell wide. Pith flecks, due to the tunneling of certain small larvae, are unusual. The annual rings of growth are quite distinct.

Black maple (*Acer nigrum*) is usually of smaller size than the sugar maple though attaining a height of eighty feet and a diameter of three feet. While rather widely distributed throughout the northeastern part of the country it is more abundant in the western part of its range, almost entirely replacing sugar maple in Iowa, and being the only hard maple of South Dakota. The tree can be distinguished in summer by its heavy drooping leaves, and at all seasons of the year by the orange color of its twigs. The bark on old trunks becomes thick, deeply furrowed, and sometimes almost black, hence the name black maple. The wood is apparently identical with that of the sugar maple in character and uses. The tree is by some authorities considered only a variety of *Acer saccharum*.

Red maple (*Acer rubrum*) is one of the most common and generally distributed trees of eastern North America. It is most abundant in the South, especially in the valley of the Mississippi river, and reaches its largest dimensions in the river swamps of the lower Ohio and its large tributaries. It is a large tree when mature. Its wood is harder and stronger than that of the other soft maples, having a specific gravity of .62. The growth rings are often indistinct and very frequently are dotted with pith flecks. The color of the wood is pale and the rays show less variation than in the hard maples, the large ones being narrower than the pores, low and inconspicuous. When viewed under a compound microscope it is noted that there are very few rays composed of a single row of cells.

Silver maple (*Acer saccharinum*) reaches its largest size on the banks of the lower Ohio and its tributaries. Its botanical range is not very different from that of sugar maple but commercially there is a difference. Most of the sugar maple is cut in northern regions, but not much in the South. The reverse is true of silver maple. The silver maple is a large tree, often divided, and with thin, scaly bark. The wood closely resembles that of red maple except that it is lighter and softer, having a specific gravity of only .53. The texture is fine and the high luster of fiber gives a silky appearance to the wood. The wood is easily worked and is moderately strong but brittle.

Oregon maple (*Acer macrophyllum*) makes its best growth along Oregon and Washington coast regions; especially in alluvial bottoms. It varies greatly in form and height in different soils and situations from a short-stemmed crooked tree from twenty-five to thirty feet high and less than twelve inches in diameter to one from sixty to eighty feet high with a straight long, clear trunk from fourteen to thirty inches through. It is a timber tree of importance in the Pacific region, where commercial hardwoods are scarce. The wood is in structure more like the soft than the hard maples but is fairly heavy, hard and strong, being intermediate of the two groups. The color is deeper and richer as a rule than in the other maples. The wood turns readily, takes a good polish, and wavy grained forms, which are common, are especially desirable for furniture.

Box elder (*Acer negundo*) has the characteristic fruit of a maple but unlike the other species has a compound leaf like the ash. Its botanical range extends over most of the United States, though it is most common in the Mississippi basin, and of its largest size in the lower Ohio valley. It is mostly a rather low, divided tree, often with a thick trunk. The wood is light, soft, not strong. The color is a creamy or yellowish white, without reddish tinge. The pores are very small and numerous, often in radial groups of two to six. The rays are without color, finer and more numerous than in the hard maples. The wood possesses very little economic value.

Rate of Natural Reforestation

The problem of reclothing with timber vast tracts in this country from which forests have been removed by ax and fire has been attracting a good deal of attention, and no very definite solution has been offered. All admit that it will be very expensive to plant trees by hand, and most people are disposed to let nature do the work.

It cannot be definitely stated how long nature requires to bring back the forests to a denuded region. Everything depends on circumstances. If a few trees are scattered here and there to bear and scatter seeds, a new forest may be under way pretty soon; but it is another matter if large areas are totally destitute of trees, as many are, and timber must work its way in from the outside. In such cases it is important to have some idea of the rate certain trees may be expected to work their way across bare tracts, having started from the edge. It is a problem which is not hopeless of solution, for there ought to be a good many facts on which to base calculations.

A French forester named Fliche has done a good deal of work along that line, and has published some figures which are backed by data satisfactory to himself. His studies were made in France. Conditions there do not necessarily apply in this country, but he has announced the general law that trees with winged seeds like pine move forward more slowly than heavy-seeded trees like beach and chestnut. That is contrary to the general opinion of people acquainted with trees. Wind scatters winged seeds; but birds and quadrupeds carry nuts and pulpy fruits. It might be supposed, however, that wind would far outstrip animals in scattering seeds.

Mr. Fliche estimates that the service tree, which bears a pulpy fruit well liked by birds, moves forward across new country at the average rate of 530 feet a year. It bears fruit when very young. Chestnut is able to make headway into new territory at the average speed of sixty-six feet a year. Chestnuts are carried by birds and small rodents and are accidentally dropped or purposely buried. The average rate of beech is a little less—it advances forty-five feet a year. Pine bears winged seeds which fly with the wind, yet its average rate of advance is given at only seventeen feet a year. At that rate 300 would be required for the front of a pine forest to move forward one mile into new territory.

These figures were doubtless worked out according to some mathematical formula, but every man acquainted with American forests will have his own opinion as to how far the figures fit conditions in this country. For instance, pine would require 50,000 or 60,000 years to work its way across Michigan, supposing it started at one edge. Beech would get across in about 23,000 years with the help of birds and squirrels; chestnut in 16,000, and service in 2,000 years.

If the rate of advance of trees into new territory were a fixed quantity, and the rate were known, it could be turned to account in a number of ways in determining prehistoric periods. For instance, it is admitted that all tree growth was destroyed in the northern part of the United States and in Canada by the advance of ice during the glacial age. The ice pushed down to the Ohio and Missouri rivers, and when it retreated, it left the whole region absolutely treeless. Forests have come up from the South and have covered the region since. If Fliche's rate of advance holds good it is possible to calculate the minimum period which has elapsed since the ice disappeared. For instance, chestnut forests would require from 15,000 to 20,000 years to move from the Ohio river to Lake Erie; beech would spend 25,000 years on the way, while pine would not make the journey in less than 60,000 years. This would seem to indicate that ice ceased to cover Ohio at least 60,000 years ago. But pine and numerous other trees have traveled much farther north than Lake Erie. From the Ohio river to Minnesota is 500 miles, and forests have had time to make their way into that region. At pine's slow rate it would consume 150,000 years in doing it; but pine is found at

least 2,000 miles from the southern boundary of the ancient ice sheet. To work up north 2,000 miles would require 600,000 years, according to Fliche.

Such a period of time seems out of the question. It is the opinion of most geologists that the ice was still in the Lake states at least as late as 20,000 years ago, and probably 10,000 years. If that is true, the glaciated region has been timbered within that time, and the French forester's estimated rate of advance of trees is not one-tenth rapid enough.

There may not be much profit in theorizing on the subject, but it is wholly worth while to ascertain how rapidly trees will advance into new areas. The practicability of reforestation depends upon that in many instances. If the rate is as slow as Fliche claims, it is useless to wait for nature to plant trees in barren regions. Fifty thousand years, or the fiftieth part of it, is too long to wait for pines to come back in Michigan. Fortunately, it is known that nature works more speedily in many parts of this country. Pines in Virginia and North Carolina, for instance, have overrun large tracts of land at a rate nearer a mile a year than seventeen feet a year. Trees of various species have advanced considerable distances into open plains from Minnesota to Oklahoma since the region was settled and grass fires ceased to burn. In portions of Texas mesquite has advanced into the open plain thirty or forty miles in half a century. It is not improbable that some tree seeds are carried by wind, water, birds, or quadrupeds five, fifty, and five hundred miles from the parent tree. Trees thus springing up and forming outposts far ahead of the slow advancing forest line would become new centers from which the species would spread in all directions.

Suggestions for Cost Accounting

In view of the well recognized necessity of figuring costs in every department of the hardwood lumber business, it is interesting to note how far apart members of the trade frequently are regarding points that ought to be matters of common practice.

The feature of overhead expense is one which seems to give more trouble than anything else. There seems to be little agreement as to what factors ought to be included in it, and also as to what it should be applied to. The result is that when lumbermen come together for the purpose of comparing notes on what is it costing them to conduct various departments of their business, they are amazed at the apparent discrepancies, which are, as a matter of fact, merely the indications of varying methods used in arriving at the result.

In determining what should be considered as part of the overhead expense, the general principle should be followed of using it only for expenses which are so general in their nature that they cannot be charged against a specific department of the business. Thus it would be folly to consider the cost of teams as overhead, because they are used directly in handling lumber in the yard, and should be considered as part of the handling expenses. On the other hand, some houses consider sales expenses, including the traveling men's salaries and expenses, as well as advertising, part of the overhead. Logically, selling should be considered apart from general administrative expenses, and set aside as a separate department. That is the only way in which the efficiency of that department can be determined. Unless the advertising is used with the definite idea of getting results, it may be considered as overhead; but the lumberman who makes proper use of his publicity can regard it as a direct sales agent and charge the item accordingly.

There is general agreement about including under the overhead division such items as rents, insurance, taxes, office and administrative expenses, telephones, telegraph, postage, stationery, etc. All supervisory work applied in handling the lumber should be considered in the yard account, so that every bit of expense which may be considered productive will not be tacked on to overhead. In other words, don't use the term merely to conceal items which ought to be brought out into the light of day and assigned to some specific department.

Two important charges, which are prominent in the accounts of most large corporations, and rightly so, are strangely missing from the statements of many able lumbermen. They are interest on investment and depreciation. It is difficult to understand why lumbermen should not desire to include every legitimate charge in figuring out the results of their business, because to do otherwise is to deceive one's self; and to omit to make a charge for either of the items noted is to overlook an important factor.

Interest on investment is sometimes disputed on the ground that the earnings of the business are supposed to take the place of it, and that if such a charge is to be made, the business is forced to carry a double burden. On the other hand, it must be remembered that business involves a large element of speculation; the man who invests his money in a commercial enterprise is undertaking a gamble, in which myriad factors and conditions are to play a part in determining the result. His own energy, ability and integrity have a lot to do with it, of course, and he is not at the mercy of the turn of a card or the roll of the dice; but nevertheless chance has a great deal to do with the result.

That being so, why should the business be compared on an even basis with one in which the returns are fixed, and about which there is no question? It is possible to buy absolutely gilt-edged securities at present at prices that will yield better than six per cent. There is not the slightest question about the interest on these bonds or preferred stocks being paid because the intrinsic values back of them are ample security of the principal, no matter how poor business might become. An investor with money to put out could buy these bonds and sit at his leisure, earning his six per cent without any fears for his principal. The same could not be said of the lumberman who invested an equal amount in hardwoods. He would do a lot of perspiring and lose a good deal of sleep figuring out ways to keep his capital unimpaired and his money turning over profitably.

This condition is one which is ample justification for the use of an interest on investment charge. It is simply taking note of the fact that the money could have earned interest without risk; what other earnings are made are developed by the business as a business, and apart from the value of the use of the money.

If a business produced but six per cent net, without having figured an interest on investment charge, then it would be in effect a failure, because the money would have produced that much return without any risk; and those in charge of it might reasonably be accused of being like the servant who wrapped his talent in a napkin and buried it; but six per cent over and above the interest on investment charge is a fair, though far from an extravagant return, and has justified the existence of the enterprise.

There may be some question about the interest account, but there should be none whatever about using a depreciation charge. In a concern which has a large investment in machinery, which is obviously subject to rapid depreciation and must be replaced at intervals, there is scarcely an opportunity to avoid using the charge; but even here enough is not made of it. In the business where the depreciation charge is taken note of along the right lines, the charge is a charge actually, and not merely for bookkeeping purposes; and a correct percentage of the business done, figured as part of the overhead, is set aside as a sinking fund to be used for the purpose for which it is logically suited, the replacement of equipment as it wears out.

To do otherwise is to admit that the depreciation charge was not needed, or to pay dividends out of money which was not part of the net earnings. If the value of the plant has really gone down—as it assuredly has—the company has a smaller value in its holdings than before; and it should be kept to the former amount by the use of the sinking fund; if it becomes larger than is needed for replacements, then the charge can be reduced or part of the money placed in

the general fund; but the mistake should not be made of using a depreciation charge on the books and then failing to apply it properly. The common practice among lumbermen who operate only rehandling yards, in which there is little or no equipment of a mechanical nature, is to use no depreciation charge whatever. They have a large investment in buildings, horses and mules, wagons and trucks, pile foundations, etc., and all of this property is certain to decrease in efficiency and value. The horses wear out or die and must be replaced; the trucks serve their term and are cast aside, and the pile foundations must be renewed from time to time, unless they were made of concrete at the beginning and prepared for indefinite use.

It is true that most of these expenses occur in such a way that it is possible to take care of them out of current earnings, and thus make them chargeable to maintenance rather than depreciation; though if a couple of mules die in the same month, as happened to a lumberman not long ago, it makes a pretty big hole in the maintenance account. The use of a depreciation charge, with the proceeds turned into a fund from which money could be drawn as needed to take care of replacements due to depreciation, would possibly be too much like transferring money from one pocket to another to suit the average lumberman; but it is a plan that has many advantages, and is approved, as indicated above, by leading houses which have studied the cost accounting proposition from every angle.

A feature which is worth noting, especially for the sake of the head of the business which is not incorporated, and which is owned personally by the proprietor or partners, is that it is extremely desirable to charge a definite amount for the services of those engaged in executive positions. To assume that this is unnecessary because the earnings of the business will go personally to the owners of it is bad logic, since that feature does not affect the proper disposition of the income and expenses. If no salaries are charged for executive work, then the earnings of the business are made to appear larger than they really are, a condition which is undesirable, to say the least.

There is a large and successful lumber concern in the South which is headed by two aggressive young men, who handle all of the administrative work. They have drawing accounts, and get enough money for their expenses, both business and personal out of the business. But they are paid no salaries, and simply take what is made during the year and regard it as their salaries for the preceding period. This is a fairly comfortable, easy-going way to run the business, but it certainly obscures a very important feature, as to what the net earnings of the business really are. They cannot be determined unless a salary in proportion to the value of his services is paid each man.

The fact that most lumber concerns are closing up their fiscal year, July 1 usually marking the beginning of a new trade period, may make these observations of some interest and practical application, as now is the time when annual statements are being made up and scanned for suggestions as to methods to be used in all departments during the succeeding year.

Waste from Edgings and Trimmings

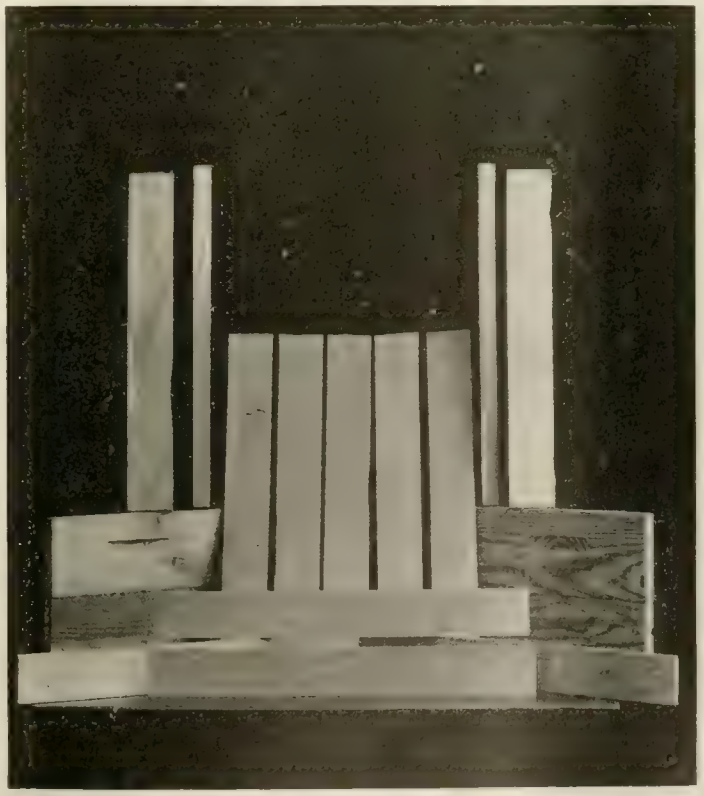
Editor's Note

The following article is written by an eastern lumberman who has made a particular study of crate manufacture as it applies to the utilization of small waste of the mill. Inasmuch as the manufacture of tomato crates provides a use for waste of all kinds of woods and all sizes, and further, inasmuch as it has been demonstrated that they can be marketed at a profit, it would seem that the suggestion is pertinent. Those wishing to get in touch with dealers handling these crates can secure this information by writing HARDWOOD RECORD.

In the April twenty-fifth issue of HARDWOOD RECORD an interesting and commendable article appeared under the heading, "Practical Figures on Hardwood Utilization," showing the astounding figures, from the Forest Service, to the effect that the actual percentage of lumber produced from a tree is only 38 per cent, while 12 per cent is saw kerf, 8 per cent edgings and trimmings, slabs 8 per cent, tops 18 per cent, stumps left in woods 2 per cent, 10 per cent bark, dressing 4 per cent.

The present article purposes to treat with the item of waste in edgings and trimmings, with a suggestion for utilizing this 8 per cent and turning a waste product into an article which will not only be a source of profit to the saw and planing mill operator, but keep a waste product out of the burner.

In those sections where the soil is adapted and permits of truck gardening in abundance and where it is followed with much success, particularly in eastern and southern New Jersey, almost unlimited quantities of tomato crates are used, the crates being used but once and never returned, thus providing a large market for this class of material. The crates are bought generally by dealers in that section, who keep them in stock, selling to the truck gardener in small lots, the dealer realizing a nominal profit for his efforts in buying, handling, carrying, nailing up and rehandling charge. A dealer doing an ordinary business of this kind oftentimes handles 500,000 tomato crates during a good season—which is usually short, covering a period of only about four or five weeks during July and August. The dealers, however, take in the crates throughout the year, storing them in warehouses.



PIECES USED IN TOMATO CRATE MANUFACTURE

The dimensions and pieces to make up a complete crate are:

2 heads 13/16"x19"x11" S1S (for stenciling).

2 clubs 1"x1"—20" rough.

11 slats 5/16"x3"x20" rough.

The heads have a slot hand hold 1½" from the top.

As indicated, the crates are shipped "knock down," most dealers taking in, either full carlots of heads, full cars of slats and clubs, or both, mixed in the car, the preference of the manufacturer governing.

A full crate contains four and one-third feet, board measure; a set of heads one and one-third; a set of clubs—one-half foot and a set of slats two and one-half; a "knock down" crate weighs

from fourteen to fifteen pounds, depending upon the kind of wood or woods used in the manufacture, and the crate may be made of chestnut, oak, poplar, North Carolina pine, cypress, or any kind of wood whatever, either mixed in the crate or mixed in the car.

The heads may be made of one piece or of two or three pieces, battened together and fastened with a corrugated cleat, thus enabling the utilization of small trimming. The clubs are made ordinarily from small edging strips.

Six thousand full crates may be shipped in a carload, twelve thousand five hundred sets of heads, when heads only are shipped, and 8,000 sets slats and clubs, when slats and clubs alone are shipped.

An 8 per cent waste in edgings and trimming, as set forth by the Forest Service experiments in the Adirondacks, means to the operator who pays $5 per thousand for his stumpage, on an estimate, a waste of 40 cents per thousand log measure. A waste of 8 per cent to the millman cutting 40,000 feet per day would mean a waste of 3,200 feet board measure, or $16 per day.

Is there any operator who would not like to save 40 cents per thousand on his stumpage, or $16 per day on the run of his mill?

No special machinery is necessary for the manufacture of the crates mentioned. A rip-saw and guide, found at any mill, does the work, boys oftentimes operating the saw.

The price paid for these crates has been found such as will yield a fair margin of profit to the manufacturer (the work being done on an efficient basis), and upon comparison of the cost item and the value of the product, by those operators who have tried out a sample carload to convince themselves, it has been found conclusive that the manufacture of this product from edgings and trimmings and other waste material will turn a waste product into a profit, with no mention of that 8 per cent item in the cost of stumpage, or that 3,200 feet per day item in the run of the mill.

O. C. C.

Sawing the Swell-Butted Log

An interesting debate was recently staged between two practical sawmill men regarding the advantages and disadvantages of various methods of sawing certain kinds of logs, particularly those larger at one end than the other, or what is usually known as the swell-butted variety. The debate was the more interesting because it illustrated again the fact that in spite of a great deal of experience with logs of this character, there is still some difference of opinion as to the best way of handling them.

The plan which seems to be generally used consists of straightening up the log by sawing off short boards along the outside, so as to enable the remainder of the log to be cut into boards running the entire length of the log. This is the obvious way, and also the easiest, because of the fact that no time is lost in blocking, as the back of the log rests against the carriage all along the line.

The objection to the plan, which was put forward by one of the millmen referred to, is that cull lumber is made out of the timber on the outside of the log, which is usually the best, while all of the heartwood, which is likely to contain defects anyway, goes into the full length boards. In this way, it is argued, the sawmill operator gets just about the same number of feet out of his log, but gets poorer lumber.

The plan which is suggested in place of this is to saw the log parallel to the outside of the piece. The full length boards thus come off the outer portions of the log. This part, as suggested above, is likely to be less defective than any other and hence it is desirable to get as many standard length boards out of that section of the log as possible.

The result of this plan will be that a pointed piece of timber, containing the heart, will finally be left, and this can then be turned around and the sawing done from the opposite direction, the short pieces thus resulting all being out of the heart. Of course, some good lumber may thus be made into culls by reason of their shortness, inasmuch as the acute angle formed at the narrow end of the log by the plan of sawing parallel with the sides takes in a considerable amount of good material adjoining the heart at the butt end; but it is urged that the amount that is thus lost is not anywhere near as great as in the operation of the other plan, which involves making culls out of the outer sections, which might have gone into firsts and seconds.

Those who oppose this plan and favor the usual method insist that the time taken to get the log shaped up properly, because of the necessity of an unusual amount of blocking, if the sides are permitted to remain divergent, is so great that whatever benefit there is through saving good timber is quickly lost. This is purely an opinion, however, and is contradicted by those who use the other system. A record of the actual time taken to do the work under the differing conditions would have to be secured in order to dispose of this feature of the question.

"In sawing a swell-butted log," said one of the leading sawmill men in the Central South, "it is certain that a part of the lumber manufactured will be cull stock, because all of it cannot be full length. Under the plan generally used, the cull stock is taken off the outer part of the log, which is almost certain to be the best part of it. Under the method followed in my mill, the cull stock is made out of heartwood, which is the poorer part of the log anyhow, and if defective will lower the grade of the lumber. The transfer of the cull stock from the outside to the inside means increasing the value of the resulting lumber materially. I have used both plans, and I know that my mill can turn out as much lumber handling the swell-butted logs in the manner indicated as if the simple, easy plan of sawing slabs off the butt and lining up right off the reel were followed. And in these days of high-priced logs, I would rather take a little more time and get better lumber than to save time at the expense of the grade I am producing."

One disadvantage of the plan of sawing parallel to the sides, which has been referred to by some millmen, is that frequently the saw dodges a trifle in going through the timber, making a defect which has to be cut out. This is a little hard to understand, especially as the log is being cut parallel with the grain. Irregularities in the growth of the tree may cause the saw to miss, and it is possible that this is the explanation of the defect, which is said by those who follow the plan to be the only drawback of consequence.

One of the principal advantages secured through the use of the method is that in the case of many swell-butted logs, especially those which are more than 30 inches in diameter—oak timber is being principally considered—and are accordingly from old trees, which have had a chance to begin to deteriorate, there are serious defects. These, as a rule, are found at the butt end of the log, near the heart. This is an important consideration in sawing logs of this character, for it is plain that if the sawing is done parallel to the sides of the log, the defects at the butt will be missed in many more boards than if the log were straightened up by sawing a slab off the butt and cutting right through after that.

In a good many cases a skillful sawyer can take a defective log of this kind, and in spite of the imperfections, which are concentrated at the butt end near the heart, can get nearly all good stock out of the timber by keeping away from the rotten or shaky section as long as possible. If he had run his saw parallel with the heart of the tree he would have soon reached these defects, and much of his lumber would have been low-

grade stock. Considering this in addition to the loss of good material suffered through the other method, it seems as though the burden of evidence is in favor of the plan just outlined.

A well-known sawmill man who is always on the lookout for good ideas admitted that he decided to change his methods in this regard in a rather odd manner.

"One day a chap came into my mill and asked for a job as filer," he said. "He didn't look particularly attractive, and as the man I had was doing satisfactory work I told him that his services couldn't be utilized.

"He took the rebuff kindly enough and stood there a few minutes watching the sawyer running the mill. He noticed the way we handled our swell-butted logs, two or three of which happened to be brought in while he was there. We were then using the generally adopted plan of taking enough off the outside in short boards to straighten the log and make the sides parallel, in order to enable it to be handled most quickly and easily.

"The newcomer laughed to himself when he saw this, and finally came over to me and said he'd like to make a suggestion. I told him to go ahead.

"'If I can show you how to save several hundred dollars a year,' he said, 'would you be willing to pay me $50?'

"I answered that I'd have to be shown mighty conclusively, but that if he could really make such a demonstration I'd pay him for the information.

"We went back to the office and he demonstrated the thing on a sheet of paper, showing me how much good lumber I was losing through slabbing and how much poor stock I was cutting long. He proved how much better it would be to saw the logs of the swell-butted type the other way. I studied the thing over for some time, and finally admitted that the suggestion was correct. I wrote out a check for fifty dollars then and there, and immediately proceeded to put the plan in execution. The sawyer objected at first on the ground that it would take longer, but after a little experimenting with the blocks we found that the log could be put in proper position on the carriage without much loss of time, and that the results, as far as the quality of the lumber was concerned, were so much better that the fifty dollars payment to the peripatetic filer was a good investment after all."

It is possible, of course, that the matter of time is of greater importance in a big mill than in a small one, and that in the latter, where the grade of the lumber must be kept high in order to make a showing, on account of the high cost of timber, it would be much better to risk a little loss of time in order to get all the good possible out of the log. But considering the problem as a whole, and remembering that the sawyer who is given an idea of the relative value of grades and the necessity for cutting good lumber as much as possible, instead of just lumber, is usually anxious to do the thing in the best possible way, it looks as if the better plan would be to follow the method suggested, and throw the cull lumber into the center of the log, where the heartwood and the natural defects are to be found anyway.

G. D. C., Jr.

Veneers and Hardwoods in Fixtures

Fixtures are midway between furniture on the one hand and interior finish on the other. Furniture is intended to be moved from place to place, as occasion requires, and with certain exceptions it will fit one room as well as another. Interior finish is not intended to be moved. It is built where it is meant to stay, and it becomes a permanent part of the room in which it is placed. Fixtures are not exactly furniture nor can they be properly considered as finish, but partake of the character of both. They may be built in place, or they may be moved in and out; but unlike most furniture, they are intended to occupy a certain position, and would be out of place anywhere else.

There are other differences. Interior finish is often largely ornamental, and is made with that idea in view, though, of course, usefulness is always borne in mind by the builder. Fixtures are more directly associated with business. They may be highly ornamental, but that is not the principal matter held in view. The man who buys fixtures does so with the idea that they will improve his business chances and make money for him. The buyer of furniture may not regard it as a money-making matter; but the buyer of fixtures always thinks of that phase of the situation. It is the main thing with him. He wants his fixtures to look nice, and designs them with the object of improving the appearance of his place of business; but that is only the means to an end, and the end is money-making. The makers of fixtures and the buyers of them study every point that will increase business. The purchaser expects them to serve as profitable advertising, and he expects also that they will assist him in carrying on his business.

Fixtures are of several kinds, classified according to the business which they are designed to assist. Those intended for one business are useless for another. Specializing is, therefore, necessary on the part of the manufacturer. He must know the wants of the buyer before he makes the article. Five general classes of fixtures are made, according to use intended. These classes belong to banks, stores, offices, barber shops, and saloons. There are, of course, many special kinds and modifications which do not fall in any particular class, but kinds include the majority of the fixtures manufactured, and most manufacturers specialize on one or the other of the classes.

The making of fixtures is an important industry in this country. The total quantity of wood demanded annually is not known, but it runs into hundreds of millions of feet, and some of it consists of the finest woods on the market. A few figures selected from statistics collected in the three contiguous states, Michigan, Illinois, and Missouri, show the extent of the industry in that region, and it is doubtless typical of the fixture industry in the whole country.

In Michigan twenty-two woods are reported in use by fixture manufacturers, and the yearly demand exceeds 24,000,000 feet at an average cost at the factory of $38.51 per thousand. There are five wood-using industries in Michigan which pay a higher average price for their lumber and twenty-seven which pay less. The total annual use of wood by the industry in Illinois exceeds 21,000,000 feet, made up of thirty-one woods, at an average cost at the factory of $41.44. Of the fifty-one wood-using industries listed in Illinois, ten pay more than fixture makers for lumber, and forty pay less. In Missouri the manufacturers of fixtures use twenty-eight woods, aggregating 10,000,000 feet a year, at an average cost of $37.24 per thousand feet. Of the twenty-three listed industries in Missouri which use wood as raw material, four pay more and eighteen pay less than fixture makers.

It is thus apparent that material much above the average is used by fixture manufacturers. Those located in the three states named buy twenty-eight per cent of their lumber in Michigan, Wisconsin and Illinois; fifty per cent in the Ohio and lower Mississippi valleys; three per cent on the Pacific coast; and the remainder in various parts of this country and the world at large. It is interesting to note the exact amounts of different woods used yearly by fixture manufacturers in the three states of Michigan, Illinois and Missouri. The woods and the annual quantity of each are shown in the following table:

WOODS USED YEARLY BY FIXTURE MANUFACTURERS IN MICHIGAN, ILLINOIS AND MISSOURI

Wood	*Feet used annually*
White oak	11,181,000
Maple	8,800,000

Red oak	6,075,000
Birch	5,470,000
Yellow pine	4,098,000
Elm	3,385,000
Yellow poplar	3,382,000
Basswood	1,928,000
Red gum	1,835,000
Chestnut	1,452,000
Cypress	1,393,000
Mahogany	1,320,000
White pine	1,260,000
Beech	778,000
Cottonwood	688,000
Sycamore	630,000
Ash	525,000
Hemlock	250,000
Douglas fir	240,000
Spruce	221,000
Redwood	200,000
Black willow	150,000
Black walnut	76,000
Cherry	72,000
Butternut	26,000
Tupelo	16,000
Norway pine	10,000
Sassafras	10,000
Hackbury	6,000
Hickory	5,000
Circassian walnut	5,000
Red cedar	2,000
Padouk	1,000
Satinwood	1,000
Locust	1,000
Total	35,495,000

The total cost of the above material delivered at the factories was $2,187,023, of which $381,618 were paid by Missouri factories, $872,995 by those in Illinois, and $932,410 in Michigan. Much of the material is high class. White oak leads in quantity, followed by maple, with red oak third, and birch fourth. Eighty-six per cent of all is hardwood, and the rest is pine, hemlock, cedar, fir and spruce. Material is drawn from all parts of the country, but most of it comes from the South. The three states for which statistics are shown are centrally situated, and doubtless represent average conditions in the fixture industry for the whole country.

Only about two and a half per cent of the wood comes from foreign countries. This information will surprise most persons; for the belief is quite general that fixtures are made largely of mahogany, rosewood, ebony, satinwood, Circassian walnut and other foreign woods. Some of these woods are used, but on an average only about one foot for forty feet of home-grown material.

The reason that expensive foreign woods make such a prominent showing in fixtures is that they are generally employed in the form of veneers, cut very thin, and glued on cheaper woods. One board foot of lumber is good for twenty or thirty surface feet of veneer. A mahogany log, for instance, that scales 500 board feet may be sliced to make from 10,000 to 30,000 feet of veneer; the veneer is applied so faultlessly that it looks like solid wood. Veneers for fixtures are made of other woods than mahogany. White oak supplies more than mahogany and red oak probably more. When veneers are used as surface finish the wood is nearly always selected on account of figure. If it is oak, it is quarter-sawed. If birch, the figure is due either to the bird's-eye effect, or to the curly or wavy grain. If mahogany, the figure is formed by interlocking or divergent fibers which produce the surface effects so much admired in this wood. Black walnut and cherry have little figure, properly speaking, and when they are worked into veneer, artistic color is the chief effect sought. The figure which characterizes Circassian walnut is due to peculiarities of growth, and is largely independent of the colors in the annual rings or in the medullary rays. Red gum (including both sap and red, for it all comes from the same tree) has a figure which closely resembles that of Circassian walnut, but the best figure can be had only by careful selection of material. Good judges of woodwork are well aware that gum veneer often passes as Circassian walnut, and is not a bit less handsome and artistic.

The best class of fixtures show the highest use of fine veneers. The broad panels and large surfaces display artistic woods to the best advantage. If a fixture manufacturer comes into possession of a choice lot of veneer, he does not need to wait long for a chance to work them into commodities and sell them. His customers are usually men who want the best and are willing to pay reasonable prices to procure it. For that reason the fixture manufacturer can go into the market and stock up with choice material and rest assured that his product will sell when it is made up.

It should not be assumed, however, that no common and medium-priced woods enter into the construction of fixtures. There is something back of the beautiful surfaces. Veneers are glued upon cheaper woods, but they are often cheaper by comparison only, for those woods are selected with care, and must possess special properties. The woods on which fine veneers are glued are known as cores or backing. They must possess the property of "standing." That is a term which means that the wood shrinks, swells, and warps but little. It is essential that corewood possess this property; otherwise the veneer glued upon it will split or buckle, and become damaged.

A number of woods make good backing or cores. White pine is usually considered to be one of the best, provided it is clear stock and well seasoned; but such stock is now too expensive for general use. Chestnut is second choice. In fact, some consider it equal to white pine; but it must be thoroughly seasoned, and chestnut is a somewhat difficult wood to season except by the slow process of air-drying. It is therefore necessary to keep it on hand for a considerable time before using in wide panels and other work; but when it is in just the right condition it is excellent core wood and it may be depended upon to hold its shape, and to protect the veneer glued upon it.

The grade of chestnut known as "sound wormy" is by some manufacturers considered better than unperforated wood for backing. The thousands of wormholes cause the glue to adhere better, and the strength of the perforated wood is ample. It is also a little lighter than sound chestnut. The holes, the size of a large needle, are made while the tree is standing, but the insects continue to work for a time after the logs are cut, and in some instances, after the lumber is piled in the yard. The insects penetrate to the hearts of large chestnut trees, and there is reason to believe that a single tree may harbor successive broods during 200 or 300 years. Chestnut timber in the South averages older than that in the North, and more of it is wormy, and for that reason more valuable as backing for veneer. The spread of the chestnut blight makes it probable that more chestnut lumber than usual will reach the markets during the next few years, for owners will try to sell their timber through fear that they will lose it if they let it stand.

Various woods find place in fixtures as frames, shelves, drawers, braces, partitions, cubbyholes and slides. Some of these may be very cheap, because they need not possess beauty or much strength. They are as useful, however, for the purposes intended as any of the other woods entering into the construction of fixtures. Not infrequently veneers are employed that are never seen after the articles are finished. Cores and backing are often of three or five ply veneers instead of solid pieces. This is not unusual where panels or other pieces are very wide. The thin sheets of veneer are glued together until the requisite thickness is obtained, and on the outer surface of this the finishing sheet is placed. Backing of that kind is more reliable than when of one solid piece, because the different sheets are laid with grain at right angles, and any tendency of one sheet to warp is counteracted by the sheet next to it. A built-up core of that kind is stronger than one of equal thickness of solid wood, and in large pieces, such as bar and countertops, considerable weight may be saved without sacrificing strength. Built-up cores are generally of rotary-cut veneers—that is, the sheets are peeled round and round the log, and not sliced or sawed thin as most of the expensive cabinet-wood veneers are.

The manufacture of fixtures calls for a good deal of carved and inlaid work; the carved requiring solid pieces, the inlay thin cuttings of very fine wood. The carving is generally seen on posts, pilasters, capitals, pedestals, beams, columns, and ornaments; the inlay in borders, mirror frames, mullions, friezes, soffets, and spandrels.

Those who manufacture fixtures buy their lumber through the usual channels, though, of course, special material must be sought outside

the ordinary avenues of trade. Those who look for finely figured woods cannot afford to wait for such material to be offered, but must seek it where it is likely to be found. It is not unusual for large manufacturers of fixtures to keep buyers in the field, whose business it is to watch for bargains in choice material, and to anticipate wants as far in the future as possible. Figured stock of extra widths is nearly always in demand in the fixture factory, because there are so many places where it can be used to advantage.

As already stated, fixtures are generally divided into several classes, depending on the use intended, such as stores, banks, offices, saloons, and barber shops. Each class consists of several articles of numerous sizes and shapes. This may be illustrated by a list of articles and pieces which make up the saloon fixture class. It is often difficult to draw the line between fixtures and furniture, for one gradually merges into the other.

The two most prominent articles in the fixture equipment of a saloon are the counter and the back bar. The back bar is behind the counter, and is usually the most highly finished piece of woodwork in the place. It is nearly always equipped with mirrors set in frames which display more or less artistic workmanship. Styles are as various as the tastes of the proprietor who buys what he thinks will suit his purpose and purse best. The real designing, however, devolves on the manufacturer. New designs originate with him oftener than with the man who will purchase the article. The maker studies his field and produces the best articles that will sell, and the purchaser selects the best that he can afford to buy. Back bars are often works of real art, equalling the finest cabinets found anywhere, and displaying the best inlay and carved work. The manufacturer who studies the conditions of his trade, frequently impresses upon his prospective purchasers the advantage of attractive equipment, because it excites less unfavorable criticism of the saloon than when unattractive fittings are used.

Back bars are made in any length desired by the purchaser, but the usual range is from twelve to thirty feet. The counter is the front part, or the bar proper, and though entirely separate in construction from the back bar, the two are matched in length, material, and workmanship, and constitute a single piece of equipment. The case of a piano presents no higher order of workmanship and displays no finer woods than some of the bar equipments.

Other saloon fixtures are office or wine room equipments, usually consisting of wood panels, frames, and glass, and not reaching to the ceiling; front cross partitions, made in the same styles as the foregoing; window screens, made of glass and panel work; display back bars where bottles are shown in racks and on shelves. Some of the display bars are equipped with iceboxes and serve as refrigerators. Other articles of equipment are coil boxes which are small refrigerators; workboards or tanks for bar counters, which sometimes combine appliances for washing glasses and arrangements for packing bottled goods in ice; coolers of large size fitted with various appliances to answer special purposes; sideboards containing cooling box arrangements; buffets constructed with cooling boxes; lunch counters; display tobacco and cigar show cases; tobacco wall cases; bottle cases; bar screens; summer doors; office railings; and numerous styles and kinds of settees, benches, and wall seats.

About this point the line between fixtures and furniture in saloon equipment may be drawn, so far as woodwork is concerned. Chairs, stands, and tables are furniture unless made specially to fit certain places, in which case they may be classed as fixtures.

The artistic effect is improved if all the fixtures in a room harmonize in style and color. Contrasts are not generally desired. Mahogany matches mahogany, oak goes with oak. Patchwork may be in good taste for crazy quilts, but not in fine wood combinations.

The problem of seasoning wood must be closely studied in the fixture factory because many of the articles manufactured are large, consisting of broad pieces and heavy posts, and any shrinking, swelling, warping and checking after the work is done would be very injurious. The different kinds of wood employed cannot be given the same treatment, and the manufacturer is obliged to use constant care, and to study the seasoning question systematically. Some woods pass through the long, slow air-drying process; some are finished in the kiln; and others are subjected to the action of steam. Every successful manufacturer accumulates experiences of his own which are of great value to him and are regarded as the secrets on which he built much of his success.

Tree Records of Climatic Changes

Few facts are better known than that the growth of trees responds to surrounding conditions; is at times rapid, and again is slow; and that the annual rings, by varying between wide and narrow, present a record of changes in conditions from year to year or from period to period. To a certain extent, a tree's history is preserved in its rings of growth.

That much can be safely asserted, but in going beyond that, as Ellsworth Huntington has done in his claim that trees supply records, not only of their own history, but of human history over widely separate regions of the earth, there is danger of following a theory much further than facts warrant. His theory is built on a strange mixture of fact and fiction, and unfortunately, fiction seems to hold the most prominent place. He starts with the admitted claim that most trees which have reached considerable age have had periods of rapid and of slow growth, and he attempts to show that climatic conditions of regions geographically distinct are recorded in the growth rings of trees; in other words, that a tree on one side of the world will record changes in climate of a country on the other side of the world. The particular point which he selects as a beginning for his argument is that the three-years drought in Palestine, in the reign of Ahab, 870 B. C., is recorded in the rings near the hearts of the oldest bigtrees of California. He enlarges from that point, and attempts to show—rather to assert, for he does not show—that the same bigtrees contain records as old as the Trojan war and that they prove that some of the historic (and traditional) events connected with ancient peoples were really due to climatic changes in Asia, Africa, and Europe, and that the venerable trees of California have preserved the records.

This might be dismissed as a clever piece of romancing if it were not indorsed and fathered by no less authority than the United States government. The Department of the Interior has printed it and offers the pamphlet—"The Secret of the Bigtrees"—for sale at five cents a copy. It thus becomes a government publication though the author is not in the government employ, but is a professor at Yale, and the expense of his investigations in California was paid by Andrew Carnegie. Professor Huntington had previously published works on climatic changes in Palestine and other Asiatic countries. He is thus entitled to serious consideration, and to the presumption that he speaks with authority. The pamphlet is beautifully illustrated and is much more finely printed than the average government bulletin.

Two summers were spent by Professor Huntington in Fresno and Tulare counties, California, where lumbermen have been cutting the bigtrees for some years. He counted the growth rings in 450 stumps, one of which was 3,150 years old, three exceeded 3,000 years, and 79 were over 2,000 years. A study of the rings of these stumps developed the data on which he worked out his conclusion that climatic changes in western Asia for 3,000 years have been directly connected with California. While the evidence appears to have convinced him, it must be confessed that it will fall considerably short of convincing some other people.

He begins very properly with a personal account of the work in the woods. This part of the story is replete with interest and is enlivened

by a chase after a bird which proved to be a bat; an occasional frog was poked with a stick to encourage it to hop out of the way so the stump's rings could be counted; and some peculiar ants, furry like mice and partly as large, had to be thrown off repeatedly and as often returned to the attack.

Then begins the mathematic part of the investigation. Professor Huntington lays emphasis repeatedly on the mathematical nature of his work; asserting that much of the proof of his claims depend on processes that are "purely mathematical," and depend "in no respect upon the individual ideas of the computer." This is reason enough for dwelling a moment on a paragraph of his story which is interesting but not directly connected with the theory that Asiatic climatic changes are recorded in the bigtree rings. In other words, he has appealed unto mathematics and unto mathematics he shall go—in a good natured way, of course. A certain bigtree, he says, made 30,000 fence posts, 650,000 shingles, several hundred cords of wood, and one-third remained unmeasured in the forest. By the ordinary reducing factors, these products figure up not less than 450,000 feet, board measure. There never was a tree on the face of the earth that would make half of it. When the Forest Service was negotiating for the purchase of the Calaveras bigtrees—some of them the largest in the world—Fred G. Plummer, a thoroughly competent timber engineer, was sent to measure the quantity of wood in the trees. He measured 862 trees, the largest to be found, and the average size was 27,738 board feet each. Only two trees exceeded 100,000 feet, and the largest of these two fell short of 120,000. Mr. Plummer indulged in no guesswork. He even bored the bark to make sure of its thickness in order to eliminate all known sources of error.

It may be argued that these errors are quibbles and do not affect the author's serious argument. How do we know that? He starts out to prove a very unusual thing—that Palestine climate has been connected with trees 9,000 miles away—and the accuracy of the whole is properly judged by the accuracy of the parts.

Professor Huntington's serious argument is worthy of serious consideration. He takes historical dates and facts in the eastern hemisphere, such as great migrations, and remarkable changes in political and physical geography, and attributes them to climatic changes in those countries. In some cases he is doubtless right in his conclusions, and in others he is doubtless wrong; but right or wrong in his treatment of the questions in the eastern countries, he must reasonably expect his conclusions to be questioned when he claims to have found evidence that the causes which led to the abandonment of a caravan route in Arabia, for instance, two thousand years ago, produced a series of narrow rings in the trunks of trees growing on the Sierra Nevada mountains 10,000 miles away. He seems to claim too much, and the evidence which he educes is insufficient. He truthfully says, "It is a far cry" from Palestine to California. It is, indeed, a far cry—too far. He assumes that a series of rainless years sufficient to dry up rivers in Syria would stunt the growth of trees in California and cause narrow rings of growth. He says he has found evidence of it, but unfortunately, he has not presented the evidence in a way to convince.

Some of the weak points in his data are these: The growth rings in the bigtrees of California, as he measured them, show nothing that cannot be accounted for by purely local conditions. The California climate, as far as the tree growth indicates, was the same 3,000 years ago as it is now. The author assumes that ancient migrations were due to climatic changes, but proof is not offered. The drying up of water along caravan routes may have been due, and probably was due, to deforestation in those regions, and there was no connection in that respect between Asia and California. An acquaintance with the history of Egypt, which he cites, makes it plain that the irruptions of barbarians from the East and the West into that county were due to the weakening of the Egyptian government—its inability to hold the hordes in check—and was in no way due to climatic changes (notwithstanding the bigtrees of California are supposed to bear withness to such climatic changes). The outpouring of Mohammedans from Arabia is cited as another result of climatic change recorded by narrow rings in the California trees. There is no more reason for believing that the Arab movements were due to climatic changes than that the Roman conquest of Gaul was due to such a change, or that the migrations of the Helvetians, as recorded by Caesar, were due to such, or the overrunning of England by the Normans, or the conquests of Tamerlane, or the present day migrations of millions of Chinese into Malaysia, or of Italians to the United States, or of American farmers to Canada, or the treks of the South African Boers in the last century or two.

The author is as unfortunate in his reference to botany as in his application of arithmetic. He insists that, in order to correctly interpret his growth data, we must take "account of the fact that all trees grow faster in youth than in old age." Since when was that "fact" discovered? and by whom? Somehow, dendrologists seem to have overlooked it. A suppressed tree in the shade of others (which is the common lot of most young trees) grows slowly until it gets its crown up to light, and then makes up for lost time. It may grow less in its first fifty years than in ten or even five years later. Age has very little to do with a tree's rate of growth. It is a matter of environment. What the author lays down as an universal fact, is a fact only about half of the time; and this must profoundly modify the value of the charts and curves which he puts forward as proof of his theory.

The author is in agreement with dendrologists in one important matter, namely, that the growth rings of a tree are a record of conditions under which it has grown; but he goes too far away in his search for those conditions. In the case of the California trees, the narrow rings which he concludes are records of the famine in the time of Elijah, or those which show trouble along caravan routes from India, or those which coincide with the Lybian invasion of Egypt, the incursions of barbarians into southern Europe, and other events of the Dark Ages, might very well be credited to local causes, and not to mysterious influences acting from a distance of 10,000 miles. In most cases it should not be necessary to go a mile from the trees to find the causes of slow or rapid growth, and surely not beyond the confines of California. Some of the influences adequate to produce all the variations in growth noted are, more shade at one time than another; a forest fire; frost out of season; scarcity or superabundance of precipitation; defoliation by caterpillars. As long as known causes are ample to produce the effects, it is unnecessary to claim miracles. There are many things relating to climate that are little understood. The sun's heat, of course, produces all climate; but winds, ocean currents and even the works of men, modify results. We do not know what effect, if any, is due to the shifting of the magnetic pole, the precession of the equinoxes, or other astronomical phenomena; but we do know that any change in climate due to such causes comes about with such exceeding slowness that the whole life of the oldest tree in California would not amount to one pendulum swing of the clock of time; and it would be impossible for yearly growth rings to record changes so long in coming and going.

When it comes to realizing on cut-over land for agricultural purposes it is well to remember that the place where good hardwoods grow is where the farmer will have the best show.

A laborer out in the hardwood yard can cut off the defective ends of boards with a buck saw, but there is a suspicion that maybe some of the portable power sawing rigs would be better.

A real estate agent selling a new house with hardwood floors and trim can give even a lumberman new ideas on the points of value and merit in the class of interior woodwork. It wouldn't be a bad idea for the hardwood folks to listen to some of these songs of the house selling agent to get boosting material.

It is really cheaper to keep a lumber yard clean and the piles in good shape than to let it go sloppy—and then think how much better the owner can rest nights when the weather is hot and dry and a spark would make a wipe-out.

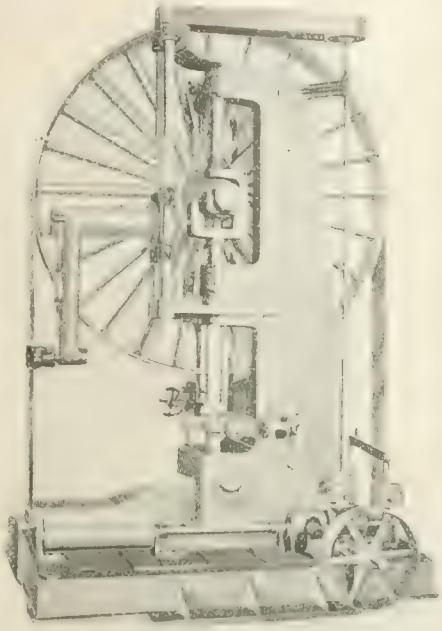
There are perhaps several things needed to make secure an uninterrupted industrial prosperity, not the least among which is some method for settling or preventing strikes.

The Evolution of the Band Saw

The remarkable development in industrial operations in this country is due to various factors. While we have always had an excellent local demand, and an unsurpassed supply of raw material, probably the chief factor bearing on the ultimate result has been the ingenuity of the manufacturers of various kinds of machinery used in industrial enterprises. This is true in all lines, including the manufacture of lumber. When one considers the tremendous amount of timber which has been turned into lumber of various sorts in the last fifty years in this country, it is hard to conjecture as to how much could have been done had not the modern band mill been developed. The original band sawmill was indeed a crude affair, and while it offered a marked improvement over the type of mill used prior to its invention, it was in itself, as compared to the modern machine, a mere plaything.

The evolution of the sawmill in lumber manufacture has been talked about quite considerably, and HARDWOOD RECORD takes this occasion to offer three illustrations showing the types of sawmills as manufactured by one standard sawmill concern, showing the development from one period to another.

Between 1875 and 1880 several attempts were made by different concerns in the United States to build a mill on which logs could be sawed with a band or ribbon saw in place of the circular saw in use up to that date. One of the first successful band mills made is shown in the second picture in this connection, and it can be seen that this mill was very crude, it being constructed almost entirely of wood, including the wheels, which were all wood, except the cast iron centerflange hub. In spite of its crudity this mill clearly demonstrated the practicability of band-sawing timber.

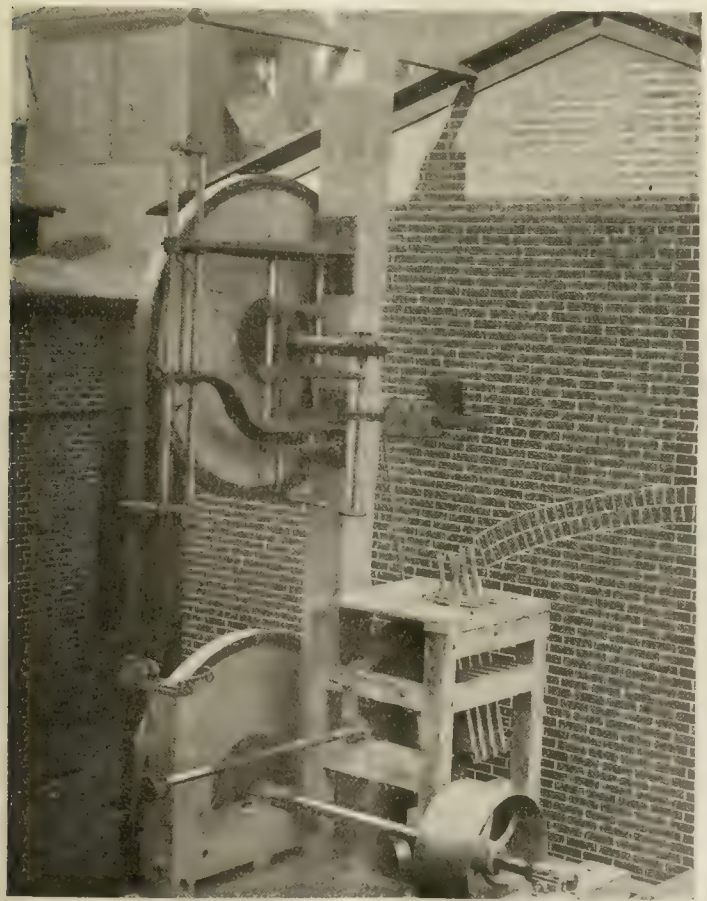


THE LAST WORD IN MODERN BAND MILL DESIGN AND CONSTRUCTION

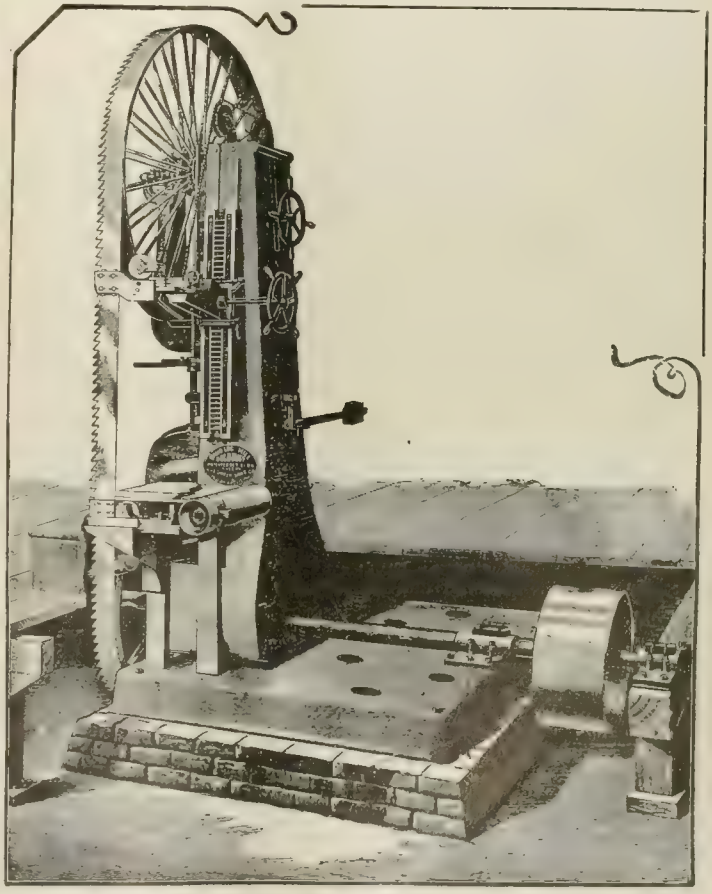
The Sinker-Davis Company of Indianapolis is responsible for the design and construction of this mill, and immediately upon completing the first one orders were received for quite a number more, which were used in different parts of the country, but particularly in Indiana and Tennessee.

Realizing the impossibility of keeping the saws in good alignment because of the expansion and contraction of the wooden frame, and the inability to make it absolutely rigid with wood, this company then designed a more suitable mill with cast iron base plate and cast iron columns, and also made the wheels of cast iron with wooden rims. The popularity of this style of mill was immediately apparent, but it had not been in operation very long when it was proven that because of its lightness it offered the same faults as did the old wooden mill.

The third type of mill shown is what used to be known years ago as the Gold Dust band mill made by the same company. This is the type of mill which was patented in the fall of 1884, and while it was of iron construction



THE ORIGINAL TYPE OF BAND MILL, SHOWING CRUDE CHARACTER OF DESIGN AND CONSTRUCTION



MILL DESIGNED BY A PROMINENT FIRM THIRTY YEARS AGO. SEVERAL OF THIS TYPE ARE STILL IN USE

throughout the framework and heavier parts, the iron wheels were built with wooden rims, or iron wheels with copper covering, as up to this time it was thought impossible to run a steel band saw on steel wheels, and all band sawmill makers built their mills either with iron centers and wooden rims, or built a cast iron wheel with rim of soft metal such as copper.

About this time the Sinker-Davis Company shipped several Gold Dust band mills to Pennsylvania in the Williamsport section. These mills were equipped with iron wheels with a copper covering riveted to the rims. It so happened that on starting up one of these mills at Williamsport the millwright who had charge of erection was unable to keep the copper covering on the wheel on account of the tremendous speed with which it revolved. The copper sheeting was simply lifted by the centrifugal force. He wired to the head office for instructions, and those in charge were in a quandary for a while as the successful operation of several equipments was in question, and the success or failure meant a very material sum of money. Finally the millwright was wired to run his saws directly on the steel rims of the wheels, and in a short time the reply came back, also by wire, that he had made the experiment suggested and the saws were working splendidly.

This was the first time on record that a steel saw was run directly on the steel or iron face wheel, and it was the beginning of the manufacture of complete iron or steel wheels for band saws. The idea was not patented at the time, and was immediately taken up by other sawmill manufacturers, and has been the standard type of band saw construction ever since. In spite of the comparative crudity of the second type of mill, there are a great many of them still operating throughout the country. There is one of the old Gold Dust patterns still in operation at Memphis, Tenn., which is sawing 50,000 feet of first-class lumber every day.

The first style of mill shown is the last word in sawmill construction and represents the modern standard of band saw equipment now employed by the leading lumber manufacturers in the country. This is the Hoosier mill made by the Sinker-Davis Company.

Thus the process of evolution originating with the wooden construction and wooden wheels has changed so as to embody steel and cast iron construction throughout with quick action, unbreakable parts, various devices for quick adjustment, and the quick handling of lumber from the saw as it comes from the log.



Wood Finish for Automobiles



There is an unmistakable tendency on the part of manufacturers of automobiles in the higher grade lines of domestic and foreign manufacture to use natural wood finish for car interiors. According to a writer in the Carriage Monthly many of the foreign cars show rich inlaid designs with mahogany prevailing.

All natural wood finishing must be based primarily for the highest degree of excellence upon a very expert and discriminating selection of wood. There is a sharp contrast between the various varieties of mahogany so that while it apparently is an easy matter to make the proper choice of the variety that would look best in the automobile, it is in reality rather difficult. The various species of mahogany sold on the general market vary in color from a deep cherry red tone to a pale yellowish tone. Some of the latter in automobile works would prove disappointing when finished if artificial coloring were not used. Although the grain of mahogany as a rule is only moderately coarse, a stain filler will be necessary to develop and bring out the finest quality of the wood unless a very light mahogany is desired. In automobile panel work, what carriage makers call feathered mahogany seems to be popular. In the absence of this physical characteristic in the wood itself, an imitation may be resorted to. This imitation is accomplished with stains applied with a camel's hair brush, going over the surface to bring out the "feather" of the real wood.

Mahogany is a wood that requires a very thorough filling, and the filler, of course, should be stained to meet the requirements of the individual. The wood finishes up in a splendid fashion, is susceptible of a high polish, and in the refinement of automobile interiors, it imparts an unusual elegance.

American oak is finding a very important place in automobile interior work. Quartered oak particularly enjoys a wide popularity in this class of manufacture. Oak is used in automobile work a great deal in comparison with plainer woods, the result being highly satisfactory. On account of its grain, it should be filled with a paste filler, after which it may be brought up and finished in a number of ways by polishing, or with a dull finish. There are various styles of finishes, such as antique, weathered, golden oak, English finish, etc.

The use of black walnut in some of the cars exhibited at foreign shows this year calls attention to the aristocratic and luxurious character of this excellent wood. Burl walnut and plain lumber and veneer are used and both are proving very attractive for the highest type of automobile interior work.

Hard maple and bird's-eye maple occupy a prominent position among the American woods in interior decoration for automobiles. As a general thing white shellac and pale varnishes should be used in bringing out the best color in this work.

Rosewood, while rather obsolete, offers an attractive looking wood with an alluring color and, while imitations are plentiful through over-graining stains applied to cheaper woods, the genuine cannot be mistaken.

Black birch is a comparatively recently popularized wood used by automobile manufacturers on account of its ornamental possibilities. It is fine grained and takes an excellent polish and easily adapts itself to all kinds of stain. In its natural color it compares to cherry and it can also be effectively stained in imitation of black walnut or mahogany. By a manipulation of stains, a close imitation of feathered mahogany is obtained, and for this purpose the wood is prized. Cherry and quarter-sawed beech are also commanding attention for modern automobile construction.

It is plain that the inlay work of interiors must have some sure protection during the staining and filling process unless, as in the case of Pullman car construction, satinwood is used exclusively for the inlay and marquetry. Satinwood, as is well known, has no grain for the stain and filler to take effect in and after these mediums have been applied the work of cleaning the inlay consists simply of using a very fine sandpaper and a little benzine. When woods other than satinwood are employed for inlay or marquetry, the ornamental parts are protected with a glue coating applied with a striping pencil. When this process is used, inlaid surfaces may be stained and finished quite up to the standard of the best finished productions.

The most pleasing echo from that Japanese incident comes in the form of a government report showing that last year was a record breaker in our trade with Japan, the total commerce going above the half billion mark, with the balance decidedly in favor of Japan. Now lets stop talking war.

Puzzle question—did the railroads really expect to get that increase in freight rates, or was it a farsighted policy of preventing successful pleas for further reductions?

And the government tried to bust a lumber trust but struck a knot.

Students of transportation believe that if our railroads would work in harmony with instead of against waterway transportation, the results would be much better for the public. That's good logic, but it is a whole lot easier to believe in it than it is to bring it about.

Dry lumber costs less for freight and is better liked by the consumer than green stock, but when the market is good there is a temptation to hustle stock to the market instead of waiting for it to air-dry. Why not more dry-kilns for hardwood?

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 497—Seeks Oak and Gum Dimension

Benton Harbor, Mich., June 30.—Editor HARDWOOD RECORD: We have a special contract which will take small piece stock in oak and gum. We shall be pleased to have you advise us as soon as possible of any lumber company that will be able to furnish us shorts in these woods.

—COMPANY.

The above inquirer is a leading furniture house which has been supplied with a brief list of oak and gum dimension manufacturers. Any others interested can have the inquiry on application.—EDITOR.

B 498—Seeks List of Canadian Consumers and Exporters

Algood, Tenn., June 28.—Editor HARDWOOD RECORD: Can you supply us with a list of wholesale hardwood consumers in the Dominion of Canada? We would also like to have a dozen names of good export concerns that are thoroughly reliable financially and that you can recommend to be good men to handle our foreign trade.

—LUMBER COMPANY.

The above inquirer has been supplied with a complete list of wholesale hardwood consumers in Canada, and a brief list of reliable American exporters. Any others interested in the inquiry can have the address on application.—EDITOR.

B 499—Seeks Curly Maple Logs

Brooklyn, N. Y., June 24.—Editor HARDWOOD RECORD: We have a customer in Austria, Europe, who is in the market for curly maple logs. Will you kindly put us in touch with such people as may be able to supply the above stocks.

This inquirer has been supplied with a list of possible sources of supply of curly maple logs. Any others interested can have the address on application.—EDITOR.

B 500—Wants to Sell Boxwood

New York, June 23.—Editor HARDWOOD RECORD: We expect in a few days a visit from W. G. M. Edwards of the firm of Edwards & Sons, Constantinople, Turkey, who is coming to this country to extend the connections of his firm with American concerns. He is particularly interested in the marketing of boxwood, and would like to be put in touch with American buyers.

The above correspondent has been supplied with a brief list of American buyers of boxwood. Any others interested can have the address on application.—EDITOR.

B 501—Concerning Hardwood Rules

Columbus, O., June 30.—Editor HARDWOOD RECORD: In your recent editorial on the subject of inspection rules, you are wrong in the assumption that "1905" National hardwood inspection rules are obsolete. I have secured several copies published by the New York City Lumber Exchange as "Northern Hardwood Rules." I believe that more hardwoods are loaded out in West Virginia under these rules than all others.

B 502—A Business Opportunity

Cleveland, O., June 23, 1913.—Editor HARDWOOD RECORD: The writer is interested in a prosperous concern manufacturing store and saloon woodwork, bars and bar fixtures, coolers, work-boards, and brass goods used in this line. This is an old established business, having been started many years ago and having been built up from nothing to a most satisfactory condition. The owner died recently and, in the absence of anyone directly connected with him competent to run it, it has been decided to dispose of it as a going concern. This offers a mighty good opportunity for some strong concern or individual to come to this city and get a line on a favorable basis. It is already so well established that it undoubtedly could be built up to large proportions. We would be pleased to hear from anyone interested in the proposition.

B 503—Seeks Connection with Exporters of Gum Logs

Macon, Ga., June 16.—Editor HARDWOOD RECORD: We have a party who is interested in getting in touch with exporters of gum logs. Will you kindly give us a list of exporters of this class of material?

—COMPANY.

The above inquirer has been supplied with the names of a few exporters of gum. Anyone interested in communicating with this correspondent direct, can have the address on application.—EDITOR.

B 504—Wants Information Regarding Veneer Operations

Wells, N. Y., July 3.—Editor HARDWOOD RECORD: Can you give us the name of any published work in book form which covers the different operations in the manufacture of veneers? We do not refer to government reports or statistics.

We have advised our correspondent that as far as we know there is no published work in book form covering the different operations in the manufacture of veneers.—EDITOR.

Clubs and Associations

St. Louis Exchange in Monthly Meeting

The meeting of the Lumbermen's Exchange of St. Louis, held on June 18 at a popular summer garden in the West End, was a success in every way. It was shown by the report of Secretary George McBlair, which was read and which was really the only matter of business that came up, that there had been about 700,000 feet of lumber inspected in May, in comparison with a very small amount inspected during the months of January and February. The report also showed that the Exchange at the present time was in a better condition in every way than ever before. It showed quite an increase in membership also.

Meeting of Quartered Oak Veneer Manufacturers

A meeting of the Quartered Oak Veneer Association of the United States was held at the Denison Hotel, Indianapolis, Ind., on June 24, D. E. Kline of the Louisville Veneer Mills presiding in the absence of the president and vice-president. Meetings are held three times a year. A dinner preceded the meeting. Representatives of thirteen veneer plants were present. They reported the total amount of 1/20-inch quarter oak veneer in their warehouses is 4,235,000 feet, as against 2,255,000 at the January meeting. Business was reported excellent during the last six months, but slackening up at the present time. There was some discussion of employing Mr. Roche, now employed by the Rotary Veneer Club, to visit manufacturers in an effort to get them together in the way of prices and maintaining prices. The matter was left to the executive committee, which will report later. The matter of revising the constitution and by-laws was left to a committee consisting of Mr. Kline, R. E. Cutsinger of the William T. Thompson Veneer Company and Herman J. Barnard of the Central Veneer Company.

Those present were: D. E. Kline of the Louisville Veneer Mills, Louisville; H. M. McCracken of the Kentucky Veneer Works, Louisville; H. C. Hossefous of Dayton, O.; C. C. Boyd of C. C. Boyd & Co., Cincinnati, O.; O. M. Pruitt of the American Timber Products Co., Indianapolis; C. H. Barnaby of Greencastle, Ind.; O. M. Mitchell of the Indiana Veneer & Lumber Company, Indianapolis; Fred Ashby of the Wabash Veneer Company, Indianapolis; Herman J. Barnard of the Central Veneer Company, Indianapolis; R. E. Cutsinger of the William T. Thompson Veneer Company, Indianapolis; N. F. Owings of the Capitol Veneer Company, Indianapolis, and J. D. Maris of the Indianapolis Sawed Veneer Company, Indianapolis.

New Chamber of Commerce Quarters for Cincinnati

On Wednesday, June 25, began the dedication of the new Chamber of Commerce quarters of Cincinnati, which lasted for three days. The quarters are located in the famous Union Central Life Insurance building, which, not considering New York, is the tallest office building in the world. It measures 535 feet from the basement to the top of the tower. The Chamber of Commerce occupies the second and third floors.

The Chamber of Commerce of Cincinnati is an historical institution. It was organized October 22, 1839, when Cincinnati had a population of about 40,000. It was continued successfully for seven years and in 1846 took over the Merchants' Exchange, which organization, like the Chamber of Commerce, was organized by the Young Men's Mercantile Library Association, which was composed of the live wires of the town at that time. Since the amalgamation of these two organizations as the Chamber of Commerce, that organization has grown into a powerful and useful institution in the city from a business standpoint. It has effected numerous important improvements of various kinds having direct bearing on the development of Cincinnati.

In 1882 the Chamber of Commerce purchased the plot at the corner of Fourth and Walnut streets and erected a magnificent granite building, the total cost of the building and lot being $850,000. This building was totally destroyed by fire in 1911 and the Chamber of Commerce immediately took up temporary quarters in the Burnett house. It recently moved into larger quarters at Sixth and Vine streets, pending the acquisition of its quarters in the Union Central Life building, which has just been completed.

New York Hoo-Hoo Holds Concatenation at Coney Island

About thirty full-grown cats made the trip to Reisenweber's Casino, Coney Island, on June 26, when about twenty kittens were made regular cats in accordance with the rules of the Concatenated Order of Hoo-Hoo. The concatenation was the first held in New York for several years and was conducted by Vicegerent E. H. Lewis, who was roundly applauded

for the general excellence and success of the affair. The Supreme Nine was represented by Supreme Gurdon George J. Michelsen of Rochester. The ceremonies were conducted by the following: Snark, E. H. Lewis; Senior Hoo-Hoo, W. K. Fisher; Junior Hoo-Hoo, C. W. Jennings; Bojum, J. A. Lacy; Scrivenoter, A. R. Carr; Custocatian, W. L. Zimpone; Gurdon, M. M. Ansly; Arcanoper, C. F. Fischer, and Jabberwock, G. J. McDonald.

Michigan Hardwood Manufacturers to Meet July 22

The annual meeting of the Michigan Hardwood Manufacturers' Association will be held at the Pontchartrain hotel, Detroit, Tuesday, July 22. At this meeting various matters outside of the regular subjects will be discussed, such as new conditions, readjustment of products, election of officers and directors. The regular subjects will be stocks of hardwoods, hemlock and lath, report of market conditions committee, reporting of various standing committees and report of the forest fire protective department.

Box Makers Planning Convention

The National Association of Box Manufacturers, through its manager, Henry B. Maxwell of Chicago, has mailed to all its members prospectuses of two proposed trips contingent upon the next annual meeting of the association, to be held in August. The membership will vote on two programs, one of which will include a trip to Niagara Falls, the convention to be held at that place, with headquarters at the International hotel. The alternative is a boat trip on the steamship North American, which has just made its maiden voyage on the Great Lakes. This trip will cover a week and is 2,200 miles long. The boat leaves Chicago and stops at various points on Lakes Michigan, Superior and Huron, and also Georgian Bay. Definite plans are held up pending the vote of the membership.

Hemlock and Hardwood for May

The Northern Hemlock & Hardwood Manufacturers' Association's report and summary for May, 1913, issued by R. S. Kellogg, secretary, shows that production for that month was ten per cent greater than in April, due to the continued cutting of the winter's supply of hardwoods and the sawing of a full run of hemlock by many firms. An active demand for lumber, however, caused an increase of forty-four per cent in shipments of hemlock and of thirty-six per cent in shipments of hardwood in May compared with the preceding month, and necessitated the movement of much partially dry stock.

The summary of reports for the last twelve months shows that during this period hemlock shipments have exceeded the cut by twenty-seven per cent and that hardwood shipments have gone beyond production by six per cent. Shipments of hemlock and hardwoods combined have exceeded production by eighteen per cent since June 1, 1912. Reports from seventy firms give these totals for May:

	Sawed.		Shipped.	
	Firms.	M ft.	Firms.	M ft.
Hemlock	51	43,358	62	47,036
Ash	33	748	18	603
Basswood	43	4,880	36	3,584
Beech	5	129	1	2
Birch	40	8,312	42	7,396
Elm	40	3,131	32	2,363
Maple	36	7,888	32	7,175
Oak	22	646	12	326
Mixed	19	11,439	12	2,569
All hardwoods		37,123		23,928
Total hemlock and hardwoods		80,481		70,964

New Committees National Hardwood Lumber Association

President Charles H. Barnaby of the National Hardwood Lumber Association announces the following committees for the ensuing year:

EXECUTIVE COMMITTEE—Charles H. Barnaby, Greencastle, Ind., chairman; E. V. Babcock, Pittsburgh, Pa.; C. A. Goodman, Marinette, Wis.; Earl Palmer, Paducah, Ky.; Oliver O. Agler, Chicago, Ill.

INSPECTION RULES COMMITTEE—J. M. Pritchard, Memphis, Tenn., chairman.

TERMS EXPIRE IN 1914—P. Moore, New York City, N. Y.; J. M. Card, Chattanooga, Tenn.; Hugh McLean, Buffalo, N. Y.; W. E. Chamberlin, Boston, Mass.

TERMS EXPIRE IN 1915—J. W. McClure, Memphis, Tenn.; C. R. Mengel, Louisville, Ky.; A. R. Owen, Owen, Wis.; D. H. Day, Glen Haven, Mich.

TERMS EXPIRE IN 1916—J. M. Pritchard, Memphis, Tenn.; J. L. Benas, St. Louis, Mo.; Robert Vestal, Toronto, Ont.; E. L. Edwards, Dayton, O.

The newly appointed members of this committee are Robert Vestal, Toronto, Ont., and Patrick Moore, New York City, N. Y.

SPECIAL COMMITTEE ON OVERWEIGHT CLAIMS—James E. Stark, Memphis, Tenn., chairman; L. L. Skillman, Grand Rapids, Mich.; D. F. Clark, Minneapolis, Minn.

TRANSPORTATION COMMITTEE—Emil Guenther, Philadelphia, Pa., chairman; J. C. West, Parkersburg, W. Va., Ed. L. Davis, Louisville, Ky.

FORESTRY COMMITTEE—John M. Woods, Boston, Mass., chairman; S. B. Anderson, Memphis, Tenn.; Sam Burkholder, Crawfordsville, Ind.

WATERWAYS COMMITTEE—Ed. T. Miller, Macland, La., chairman; Thomas McFarland, Cairo, Ill.; W. H. Russe, Memphis, Tenn.; J. Edw. Crusel, New Orleans, La.

Carriage Builders to Meet in October

The Carriage Builders' National Association announces that it will hold its forty-first annual meeting at St. Louis, Mo., during the week commencing Oct. 12, 1913. At the same time and place the annual exhibition of parts of vehicles, automobiles, models, materials, etc., pertaining to carriage, wagon, automobile and accessory industries will be held. The coliseum at St. Louis, an excellent building for such purposes, will contain the exhibitions. This building is large enough to accommodate all those who wish to exhibit their products.

With the Trade

Big New Mill for Michigan

The first log was sawed on the fine new mill of the Marshall Butters Lumber Company at L'Anse, Mich., the latter part of last month. The Marshall Butters mill is located in the upper peninsula of Michigan, and is said to be the finest and largest of the many fine mills in that famous lumber producing section. The entire plant, which will have a daily capacity of about 200,000 feet, is equipped with the usual sawmill equipment and in addition with a shingle and lath mill equipment. The sawmill consists of two eight-foot band saws, an eight-foot vertical band resaw, two double edgers and an automatic trimmer. The design and construction of the mill are modern and well thought out in every particular and include a complete sprinkling outfit.

The new mill is located on L'Anse bay, near the mouth of Fail river. This location gives it unusual facilities for the handling of lumber.

The company already has in operation some six miles of railroad into the timber, and several locomotives and a large number of logging cars are ready for service. The construction of the new Marshall Butters mill means a great deal for the town of L'Anse.

Change in Name

The Swann-Day Lumber Company, Clay City, Ky., has been reorganized as the Day Lumber & Coal Company, with a capital stock of $1,000,000. Among other properties that the company takes over in the eastern Kentucky territory are the holdings of the Swann-Day Lumber Company and Floyd-Day & Co., including its sawmills, planing mills, stave plants, numerous mercantile establishments, railroads, timber and coal lands.

The officers and directors of the new company are: Floyd Day, J. C. M. Day, C. M. Clark, L. Loving and A. H. Davis.

Both the general and sales offices will be located at Clay City, Ky.

This is one of the most important reorganizations in hardwood lumber affairs that has occurred for some time, and it puts the entire Day and allied interests in one comprehensive, well-organized institution.

New Hardwood Mill in Texas

A. von Ree is constructing a large new hardwood mill in Palestine, Tex. The work has not yet been completed as unforeseen delays were experienced. It is announced, however, that the plant will be ready for operation within three or four weeks. It will be one of the finest hardwood plants in the South when completed.

New Veneer Concern in Memphis

A new $100,000 veneer plant will shortly be constructed at Memphis. It is planned to start work on the new structure within a few days. The style of the concern operating it is Nickey Brothers & Bass. It is hoped that active operations will be in progress by the first of November.

Log Salvage Company Formed

Cincinnati and Kentucky interests are the organizers of a new concern, the principal object of which will be to salvage logs for Kentucky River mill owners. The style of the new concern is the Kentucky Log Company. It was organized at Cincinnati with a capital stock of $30,000. It will catch drifting logs on the Kentucky and Ohio rivers during the spring freshets, and in addition will put into operation new ideas of economy in logging and sawmilling in the hardwood business of that territory. It is planned to erect a series of booms along the river for the purpose of checking logs which come out with the spring freshets. In addition cheaper and safer facilities for bringing in logs from the timber will be employed.

The Mowbray & Robinson Company and Leland G. Banning of Cincinnati, and the Bellpoint Lumber Company of Bellpoint, Ky., have subscribed to the entire stock, although the two former concerns own the large majority of it.

The headquarters will be maintained at Cincinnati, and the officers will be: A. E. Hart of Leland G. Banning, president and treasurer, and E. O. Robinson, secretary.

Seventy-One Years in the Wagon Business

Monday, July 1, was the seventy-first anniversary of George Yule as an employe of the Bain Wagon Company, Kenosha, Wis. Mr. Yale first secured work with Henry Mitchell, pioneer wagon maker, at Southport, seventy-one years ago. When the Mitchell & Quarles Company was taken over by the late Edward Bain in 1852 young Yule became superintendent of the plant. In those days wagons were built entirely by hand and the factory output was very small. After thirty years as superintendent, in 1882, the company was incorporated as the Bain Wagon Company. Mr. Yule was elected vice-president and continued in the capacity of general superintendent. In 1890, with a record of fifty years of continued success, Mr. Yule was elected president of the company. Later on the heirs of the late Edward Bain retired from the firm and Mr. Yule became not only president but principal owner. Today, although nearly eighty-nine years of age, Mr. Yule has no intention of retiring from active work at the head of the company. He has probably the most unique record of any

man in a responsible position with any big manufacturing concern in the country. The plant is one of the great wagon making concerns in the country and has an annual capacity of thousands of wagons as compared with a few wagons of sixty years ago.

R. J. Darnell, Inc., to Build at Batesville, Tenn.

Much regret has been occasioned in lumber circles in Memphis by the announcement of the decision on the part of R. J. Darnell, Inc., to rebuild its double band mill at Batesville, Miss., instead of at Memphis. This mill was burned about a fortnight ago, together with the veneer machines operated by the firm. It is proposed to re-establish the veneer machines at Memphis and to operate about a dozen of these. There is also a strong probability that a single band mill may be built at Memphis by this firm. The main plant, however, will be established at Batesville, where the company has its most extensive timberland holdings. It is regarded as cheaper to build the mill at Batesville, near the base of timber supply, than to rebuild at Memphis and transport the timber to this point. Batesville is the northern terminus of the Batesville & Southwestern railroad, which is owned by R. J. Darnell, Inc., and which is now nearing completion. This road will be used to facilitate the development of timber on the land owned by the firm in that section. Mr. Darnell said recently that he was making arrangements for the rebuilding of the mill at Batesville and that work would begin as soon as possible. R. J. Darnell, Inc., also operates two mills at Leland, Miss., and these are being used to fill the orders of the firm as far as possible while the burned plants are being rebuilt.

New Mills in West Virginia

Sawmill construction is being quite actively prosecuted in sections of West Virginia. According to information received the Spice Run Lumber Company, at Spice Run, on the Greenbrier branch of the Chesapeake & Ohio railroad, is completing the construction of a nine-foot band saw of a capacity of about 50,000 feet a day, and will have a plant in operation within about thirty days. The company owns 9,000 acres of timberland, most of it hardwoods, with about twenty per cent hemlock.

Another mill is being erected by the Modoc Lumber Company, of which Mr. Wise is practically the sole owner. The plant is located at Clover Lick, in Pocahontas county, and will consist of a six-foot band, with the necessary appurtenances. Operations will be commenced in about a month.

Still another plant is going up on a tract of about 1,700 acres of hardwood timber purchased from the Berwyn-White Company and located along the Meadow river. The plant is being erected at the town of Springdale by the Hutchinson Lumber Company of Huntington, W. Va., alongside the railroad built by the Meadow River Lumber Company. This plant will consist of a seven-foot band saw, and work on it is progressing rapidly, though hardly more than the foundation is up so far.

Givens-Wells

James M. Wells, now with the American Hardwood Lumber Company, St. Louis, Mo., was married on Monday afternoon, June 30, to Miss Elizabeth Kathryn Givens of Nashville, Tenn. The ceremony took place at Miss Givens' home in Nashville, and was witnessed only by intimate friends and relatives of the bride and groom. Rev. S. E. Tull, pastor of the First Baptist Church, officiated.

The bride is the daughter of Mr. and Mrs. John A. Givens of Nashville, and she and her family have lived in that city for several years.

Mr. Wells was originally connected with the Tallahatchie Lumber Company of Philipps, Miss., and later with the Lucas Land & Lumber Company of Paducah, Ky. He severed his connection with the last named concern some time ago and has since been with the American Hardwood Lumber Company.

The bride and groom are now on a wedding trip to western points, and will be at home at 5585 Etzell avenue, St. Louis, after July 10.

Pertinent Information

Rough and Finished Lumber Under Different Classifications

The Interstate Commerce Commission recently decided in favor of the Eastern Wheel Manufacturers' Association as against the Alabama & Vicksburg Railway in a suit involving classification. In its decision the commission suggested that the classifications of forest products by the railroads could very justly be changed to insure greater uniformity and, in order further, to establish the relative rates on various classifications of forest products to each other. The opinion stated that the rating of rough and finished products of the forest under the present methods does not offer an equitable basis and should be changed for a more logical classification.

In the case noted, the railroads have charged higher rates on shipments of club-turned spokes than they did on lumber from the same territory. It was established at the hearing that there is a great variety of forest products similar to club-turned spokes which are carried at the lumber rates, and that spoke manufacturers compete with manufacturers of lumber and of other products carried at the same rate in the purchase of stumpage. It was further brought out in the testimony that lower rates are prevalent in certain southern territory in which spokes are manufactured on shipments to the East than are enjoyed by competing manufacturers on the same lines and in the same territory. It was also shown that east-bound rates on these products are higher in most cases than are lumber rates, while on shipments to the West they are practically the same. The spoke manufacturers maintain that because of saving in freight to the consumers and loss of tonnage to the carrier because of the reduced weight of club-turned spokes as compared to spokes in billet form, increasing the rate on the spokes would not be justified. The decision of the commission charged that it is unjust and a direct discrimination to charge a higher rate on club-turned spokes than on various other wooden articles more or less finished in character, which now move at the same rate as lumber. The commission's decision also suggested that there is too great a lack of uniformity in the publication of rates on spokes and that this condition should be remedied.

Specifically, the decision provides that after and including Sept. 15, 1913, all club-turned spokes shall not take a higher rate than oak and hickory lumber. The decision is qualified, however, with the suggestion that the carriers have the privilege of submitting re-classification of wood products in conformity to the commission's suggestion and that in case such a re-classification is submitted, the commission will reconsider the original petition.

The commission makes specific suggestions relative to a re-classification of forest products which, if they went into effect, would have a tremendously important bearing on lumber shipments throughout the country. The suggestions state that rough lumber and finished products should not be given the same rating but that the differentiation must be based on correct principles of classification. To arrive at this proper classification, it is suggested that publicity be given by the three classification committees of a uniform lumber list to be divided into three or more classes. The first should include rough lumber and the succeeding classes to include wood articles in their various stages of manufacture. The opinion further suggests that a fixed and proper rate relationship should be established between the manufactured articles and the rough lumber from which they are made. Also, publication of lumber rates in commodity tariffs should under this arrangement automatically fix the rates on lumber products at the proper differentials.

Imports and Exports of Wood for May

The figures which follow represent the imports and exports of wood and the manufactures thereof for May, 1913, and are supplied by the Bureau of Foreign and Domestic Commerce:

Imports: Briar root or briarwood, and ivy or laurel roots, $16,437; cedar, 1,076,000 feet; mahogany, 7,861,000 feet; other cabinet woods, $180,935; logs and round timbers, 25,776,000; pulpwood, 90,867 cords; rattan and reeds, $84,668; sawed lumber, 110,060,000 feet; laths 53,029,000; shingles, 98,135,000; all other, $66,605; chair cane or reed, $57,147; furniture, $52,910; woodpulp, 85,853,465 pounds.

Exports of lumber: Cypress, 1,973,000 feet; fir, 71,983,000; gum, 8,869,000; oak, 28,759,000; white pine, 6,557,000; yellow pine, 94,395,000; all other pine, 23,000,000; yellow poplar, 3,697,000; redwood 1,255,000; spruce, 4,415,000; all other, 18,091,000. Total lumber, 263,014,000 feet; joist and scantling, 2,259,000 feet; railroad ties, 671,260; shingles, 6,835,000; box shooks, 1,327,584; other shooks, 228,093; staves, 8,799,513; heading, $28,965; all other, $303,753; doors, sash and blinds, $164,392; furniture, $614,765; empty barrels, $35,558; incubators and brooders, $14,328; house trimmings, $77,811; woodenware, $64,132; woodpulp, $71,992; all other manufactures of wood, $718,423. Total wood manufactures, $11,902,580.

Government Will Not Purchase Pisgah Forest

The Forest Service at Washington, acting under the Weeks' Law, recently made a thorough examination of Pisgah Forest, North Carolina, owned by George W. Vanderbilt of Biltmore, N. C., with the idea of purchasing it if available for the Appalachian National Forest. The service announces as a result of the examination that it does not deem Pisgah Forest a desirable purchase and hence the negotiations are off. While no specific reason was given in the report, it is believed that Mr. Vanderbilt asked too high a price to make the purchase feasible. It is probable also that a contract recently entered into by Mr. Vanderbilt with a certain lumber company, providing that it may cut certain timber within a certain period, was another factor which influenced the mind of the government experts.

Wisconsin's Free Employment Offices

A bulletin recently issued by the Wisconsin Free Employment Offices gives an account of the progress made in that state in bringing employers and laborers together. During nine years the officers have assisted 142,400 persons to find employment. It is not claimed that this success is very great, but it is fairly satisfactory when difficulties and drawbacks are considered. Private employment bureaus, which charge for their services, are very active, and many laborers, particularly of the better sort, patronize them because the public offices look like charitable institutions and there is prejudice against them. The free bureaus promise no jobs. Their purpose is to bring prospective employers and employes together and leave them to make their own bargains. In other words, they are simply information bureaus run in the interest of those who want work and those who want workers. The free bureau is the means of finding employment for 3,000 farm laborers a year.

The Gould Southwestern Adjudged a Common Carrier

The Gould Southwestern Railroad, an incorporation owning about thirty miles of main and spur line, the main lining running from the Iron Mountain at Gould, Ark., to Star City, Ark., has been awarded a favorable decision by the Interstate Commerce Commission, which again places it in the ranks of common carriers. In the early part of 1910 the commission handed down its first opinion, which specified that this road could not be operated as a common carrier but must be considered as a tap line. The result of this has been the loss of a very material amount of business in freight hauling and as well has entirely retarded development along its right of way. The case has strung along for the last four years without any satisfactory conclusion until the recent decision, which was formally submitted to the railroad the latter part of June. As stated, the company can now operate as a common carrier, and hence the opportunities for development of various kinds along its right of way will be fully exploited.

New System of Assembling Logs in Wisconsin

Representatives of cities in northern Wisconsin and lumber companies of those cities have succeeded in their fight against the Tomkins bill, which provided for the assessment of logs wherever they were on May 1 of each year. The new bill, which has now become a law, provides that logs in transit are to be considered already at the mill for the purpose of taxation. The original method was to tax the logs cut, in the cities where they were to be manufactured into lumber. The Tomkins bill provided to tax the logs wherever located on May 1. The new bill provides for taxing cut logs at places where they are cut, provided they are not ready for shipment, after which time they are considered at the mills and are taxed in the town of their destination. If the Tomkins bill had remained in force many cities such as Marinette, Peshtigo, Oconto, etc., would have lost thousands of dollars yearly from their taxes. The substitute, while not providing for the bringing of the entire tax, as heretofore, to the city of destination of the logs, is a great improvement and will not make such a severe loss for these cities.

Proposes to Pool Cars

The American Railway Association, through its car service bureau, recently made a proposition that, if it goes into effect, should go a long way toward protecting car owners and preventing car shortages. The plan is to pool the box cars of the various railroad systems of the country. It would be organized by the railroads, and the plan would be subject to regulations aiming toward the highest efficiency of service obtainable.

The plan proposes that instead of the smaller roads grafting on the large car owners, all the roads of the country will pool together and own the box cars in common. A further advantage will be that the various rolling stock will become standardized.

Changes in Wisconsin Compensation Law

The bill providing for new amendments to the Wisconsin risk law, better known as the workmen's compensation act, has been passed and signed by Governor McGovern. It will go into full effect on September 1, 1913, at which time every employer of four or more persons will be subject to the provisions of the act unless he specifically elects before that time not to be so subjected. The principle of the act remains the same, but several important changes in the detail have been made upon recommendation of the industrial commission. The benefits to injured employes or their dependents remain almost unchanged, the chief exception being that permanently disabled employes are to be compensated for a period of six years from the date of injury. The new act abrogates the defense of contributory negligence. The 1911 act abolished only the two defenses of assumption of risk and negligence of a fellow servant. The abrogation of the third defense places Wisconsin upon an economic equality with several states whose industries are similar to Wisconsin's. All three defenses are restored only to those employers whose employes refuse to accept the act. Provisions of considerable importance to contractors who are made liable for injuries to employes of sub-contractors are provided. Special provision is made, however, for the contractor to protect himself against losses. Specific provisions for compensation are made in cases of specific injury, such as the loss of fingers, or parts thereof, arms, legs, etc. The table of specific compensation is the result of scientific deductions drawn from the wide experience of the industrial commission in administrating the law since 1911, and will aid in making speedy adjustments under the law. An entirely new section requires all employers to carry insurance unless exempted by the industrial commission. These exemptions may be secured from the commission by filing satisfactory evidence that the employer is financially able to carry his own risk. This applies, after September 1, to those under the act not carrying insurance on June 30. Before September 1, when every employer comes under the act unless notifying to the contrary, evidence must be filed so that when the law goes into effect the commission can have issued or declined permission to employers to carry their own risks. Other new provisions include one under which employes may secure compensation on account of time lost through infection not due to the neglect of workmen. Another original provision provides compensation in cases of serious disfigurement. Still another reduces compensation on account of old age, on the assumption that employes over sixty years old have fewer persons dependent upon them. This provision also is designed to prevent discrimination against aged workmen. Another provision reduces compensation on account of intoxication of employes and increases it in cases where the employer has neglected providing proper safeguards against accidents.

The provision under which employers automatically will come under the law unless they elect to the contrary will affect approximately 2,000 employers in the state, 1,500 employers having already come under the law. Practically every lumber manufacturing and woodworking company in the state has come under the act. Among the more recent firms to file their acceptance are the Buckstaff Company, Oshkosh, employing from 200 to 250 persons; the Conway Veneered Door & Mantel Company, Milwaukee, 123 employes, and the Marinette-Green Bay Manufacturing Company, Green Bay, 20 employes.

Chairman C. H. Crownhart, of the state industrial commission, reports that during the twenty-one months that the law has been in operation claims numbering 3,491 have been settled at $197,472.50. There were 3,418 claims filed by individuals against private persons, firms and corporations, and the total allowed them was $179,529.27. Claims against the state and municipalities were 73, for $17,880.26.

The Automobile Industry in Switzerland

The automobile industry is developing rapidly in Switzerland, the demand for medium-priced touring cars and motor trucks is constantly increasing, and during 1912 the demand could only be supplied by Swiss factories after long delay. No important changes in the construction of the cars were announced, prices remained good, and the factories producing a certain type of car in large numbers report a profitable business. Exports of high-grade cars, motor trucks, and motorcycles in 1912 amounted to $2,762,915.

The Swiss factories were all busy during the year, especially those producing commercial cars and motor trucks, most of which find a market in the country. This particular branch of the industry is increasing rapidly, and many of the factories that formerly produced only touring cars are now engaged exclusively in the manufacture of heavy trucks and delivery wagons and hotel motor buses. The Swiss government is also a good patron of the motor industry, as large orders are being placed for motor vans for transporting the mails. There is also a demand for military motor transports in Switzerland and in other European countries.

The invasion of Europe by the American-made automobile, which until a few years ago was denounced by the continental manufacturers as cheap and worthless, continues. The demand for American cars in the Swiss market is confined generally to those of medium or low price, as the European manufacturers have given little attention to the production of that class of machines.

The American automobile has taken its place beside the best makes of other countries, its efficiency and durability having been demonstrated by the severest competitive tests of speed and endurance. A feature of the American car of medium price is the style and finish, which are superior to the cheaper grades of the European makes. They are also stronger and more durable than the cheap continental cars, being built for roads that are more trying, and which require the greatest strength and elasticity in spring and movement to withstand severe strains, a circumstance which guarantees to the car a much longer life and more satisfactory service when utilized upon the excellent roads in most of the European countries.

Through Bills for Export Continued to August 15

Exporters of lumber in Memphis are very much concerned with the through bill of lading problem which confronts them. Following the expiration of the recent agreement between the west side lines and the steamship companies at New Orleans, whereby through bills of lading were to be issued and demurrage charges were to be absorbed at that port, it was feared that through bills would be entirely discontinued by the lines in question. In fact, the Southern Hardwood Traffic Bureau and the National Lumber Exporters' Association both took this view of the matter, and the former made arrangements to send a committee to Washington to take the subject up with the Interstate Commerce Commission. Four of the steamship lines—the Harrison, the Leyland, the French and the Lamport & Holt—came to the rescue by announcing that they would continue to honor through bills of lading and absorb demurrage charges, with the result that the west side lines declared that they would issue through bills until August 15. This is the status of the matter at present, but lumber exporters are discussing the subject and are contemplating the best steps to take to bring a definite solution of this matter.

It was decided at one time that the Southern Hardwood Traffic Bureau should send a committee to Washington to confer with the Interstate Commerce Commission, but this plan was changed when the four steamship companies announced their concessions. This subject of through bills comes before the commission at New Orleans July 30 and the issues involved will be fought out before that body at that time. This case, known as the Anderson-Tully Company vs. the Morgan's Texas & Louisiana Line, is on the suspended calendar, with the result that the subject comes before that body in regular order. Every effort will be made by the lumbermen to secure an order from the Interstate Commerce Commission compelling the roads to issue through bills.

George D. Burgess, chairman of the Southern Hardwood Traffic Bureau, is authority for the statement that there is no possibility of settling this controversy satisfactorily until the Interstate Commerce Commission act has been so amended as to give the Interstate Commerce Commission

jurisdiction over the steamship companies. He says that this is necessary in order to prevent the latter from acting arbitrarily and without due regard for the interests of shippers. There is a suggestion that the Illinois Central Railroad Company and other east side lines will in the near future refuse through bills of lading on all commodities with the exception of cotton, while the announcement of the withdrawal of through bills on all commodities, including cotton, has been announced by the west side lines, effective some time in the future. The cotton and lumber men have not been working together on this through bill of lading controversy heretofore for the reason that the carriers have favored cotton as against lumber. If both interests are put on the same basis, however, it is regarded as virtually certain that they will join hands in the fight made to secure proper transportation accommodations. It is the consensus of opinion among both cotton and lumber men that it is impossible to conduct a profitable export business in either cotton or lumber without the use of through bills of lading through which reimbursement is obtainable. There is so much money involved that no firm is strong enough to finance its business without such reimbursement.

The question of annual contracts for export shipments of lumber during the ensuing year is also agitating lumber exporters to some extent. They have never had difficulty in making their contracts heretofore, but it would seem that the steamship companies do not care to renew present contracts except at a considerably higher rate. Most of the contracts expire the first of August or the last of that month. The time is running rather short for the renewal of these contracts, and this subject will engage the attention of the individual lumbermen as well as the Southern Hardwood Traffic Bureau and the National Lumber Exporters' Association during the next few weeks.

Timber Cruising Manual

A handy, compact, well planned and clearly written timber cruising manual, by E. A. Chase, has just been published by the American Lumberman, Chicago, in pocket edition size. The author has evolved some new ideas in the method of keeping record of timber cruises. In addition to this, the book presents in condensed form much useful information for the cruiser in the woods. Doyle's and Scribner's rules are given in abridged form, but all that is needed under ordinary circumstances. The price of this useful book is 75 cents a copy or $7.50 a dozen.

Problems of Industrial Education

John H. Leete, dean of School of Applied Science, Carnegie Institute of Technology, Pittsburgh, Pa., said in an address before the National Association of Manufacturers that shortly after the opening of the nineteenth century the industrial life of the country underwent a change. Home industries gave way to factories. Commerce became secondary to manufacture. Large cities developed and with them an extensive non-taxpaying population. Labor organizations were born. From the working people as a whole, but chiefly from the cities and labor organizations, arose the demand for free education.

As a result of this agitation and notwithstanding opposition from certain classes, free schools were established during the first half of the century throughout the eastern states, by state legislation. The training was at first limited to the same three R's of the earlier system, and it was not until the middle of the century that geography, history and grammar found a place in the public schools. The arguments of the advocates of public education in this period have been summarized as follows:

(1) Education increases production.
(2) It diminishes crime.
(3) It prevents poverty.
(4) Education is a natural right of all men.
(5) Universal education is necessary to preserve free republican institutions.
(6) Free schools prevent class differentiation.

In this period it is to be noted that the conception of the function of education has considerably broadened; it now includes the natural rights and temporal welfare of the individual and the political and economic interests of the state. The economic value of education, however, was still regarded as a by-product which resulted purely from the increased intellectual capacity developed in the individual. There was still no effort made to train directly for industrial efficiency.

There are some respects in which our education of today demands radical reform:

1.—The opportunities offered for training in the different fields should be more closely proportioned to the demand for trained men in those fields.
2.—Greater effort should be made to direct the individual toward the work to which he is best adapted.
3.—The elementary and secondary training of the scheme of public education should be better adapted to the needs of the boy who must leave school at an early age to take his place in the occupations requiring comparatively little training.
4.—Greater opportunity should be offered the workman to obtain the additional school training necessary for advancement in his calling.

Just how inadequately our educational system is supplying the present need of industrial training in the United States may be shown conclusively by a few statistics. Of the 35,000,000 persons in gainful occupation in the United States, 10,000,000, 30 per cent of the total, are employed in manufacture and mechanic arts. What is our system of education accomplishing for the training of the children and youth who are to take places in this industrial army?

Our grammar schools have made but a bare beginning of manual and vocational training—a beginning even in its conceptions pitifully inadequate. In our secondary schools only 6 per cent of the total number of students are enrolled in technical or manual training courses. In our higher institutions the proportion is more favorable since about 18 per cent of the total enrollment are pursuing courses in general science or engineering.

When it is remembered, however, that the majority of our 18,000,000 school children leave school before completing the grammar grades, having practically no industrial training—when it is remembered that in one great industrial city 72 per cent of the children leave school by the end of the sixth grade—the meagerness of the contribution of our educational system to the manufacturing activities of the nation is startling. By the report of the national commissioner of education it is shown that there are 178,000 students in professional courses as against 123,000 in engineering and the manual arts.

When we reflect that only 4 per cent of our wage earners are to be found in professional service, while 30 per cent are engaged in manufacturing and mechanical pursuits, the disparity of training material available in the two fields is further emphasized. There is a growing appreciation of the existence of a chasm between our schools and modern industrial life, a chasm which industrial education should bridge.

No formula can be prescribed which will prevent misfits—but more can be done in this regard than has been done. Among other ways I would suggest these three in which recruits for the army of industry might be helped toward their proper place in the ranks.

(a) The elementary school years should contain instruction in subjects which would enable the pupil to determine whether his interests and abilities lie in the making of things mechanical.
(b) Vocational instructors should be provided, who should in informal class talks acquaint the pupils with the labor conditions and with opportunities in the different fields, and by observation of the individual pupil at his different tasks be enabled to advise him wisely as to his future work.
(c) The manufacturer has exceptional opportunity to form an estimate of the kind and degree of ability possessed by the young men in his employ.

The pressing needs of industrial education today are:

1. The provision of vocational training for the different fields of activity approximately commensurate to the demand for trained men in those fields.
2. More efficient direction of the student toward the work to which he is best adapted.
3. Adaptation of the training of an adequate period of compulsory education to the needs of the future skilled workman.
4. Facilities for supplementary education for the workman and co-operation on the part of the industries to make such continuation schools efficient.

Woods Used for Making Shoes

In Holland, Belgium, and many parts of France, especially in the mountainous districts, the peasants wear in summer and winter wooden shoes, or sabots, stuffed with straw and covered with the corduroy gaiters. The manufacture of sabots is carried on chiefly by those who are employed a part of the year in agriculture, and during the rest of the year work at their trade. The Scotch pine (*Pinus sylvestris*), so extensively distributed over parts of northern Europe, has long furnished the wood for making the shoes. Many thousands of peasants in their leisure hours during the long winters work up pine wood into shoes for their own use. Besides these peasants there are many who are by profession sabotiers or shoemakers. A sabotier will make, on an average, six pairs of sabots per day, assorted sizes, for men, women and children; this is the labor of an ordinary country workman. In the towns and cities, where the labor saving machines and division of labor have been introduced, greater efficiency has been attained. One workman will do the shaping of the wood, another attaches the leather, a third finishes the work for sale, or hands the shoes over to others to ornament, blacken or varnish.

It is difficult to ascertain with any precision the number of persons engaged in the manufacture of wooden shoes and the quantity and kinds of wood used annually. The woods most commonly employed in this industry are pine, birch, beech, walnut and alder. The wood of white willow, which is light, tough, and resists a great deal of wear and tear, is highly esteemed for making wooden shoes. Ash, maple, cherry and mulberry are used chiefly for making fancy and more expensive grades of shoes. The European elm woods are used only to a limited extent.

French-Polishing in England

A writer in the Illustrated Carpenter and Builder says that French-polishing is the means whereby the greater portion of the household furniture is given that bright, smooth, finished appearance, which reflects and shows up the figure of the woods used in its construction. It is especially noticeable on the better-class goods that are faced with choice veneers.

One of the chief advantages of this method lies, not only in the apparent ease of its application, but in the fact that it is equally applicable to the cheaper class of goods that are stained to represent the color of a more expensive wood as for the finish of really costly woods. Hence it comes about that even very cheap furniture as well as the most costly, is generally described as French-polished.

There are, of course, some exceptions to this general rule, such as oak furniture, which we know has been wax-polished, but it does not follow that an equal amount of labor in its application is bestowed on cheap and costly furniture alike. Far from it.

On the latter class the lac solution commonly called French polish — may have been laid with friction from start to finish; whereas on the cheaper class of goods the greater portion of the solution would be put with a camel's-hair brush; but in neither case are the possessors of such finished goods willing to describe it as varnished.

Despite the many changes that have taken place in the method of its application and finish, shellac still holds its own as the principal ingredient of the polish solution.

In the earlier days other gums and resins were added in varying proportions to the shellac, no doubt because it was not so pure as it can be had today. Experience teaches that good work can be accomplished by the solution of shellac and spirits only raw linseed oil being used in minute quantities with it to enable it to be more easily distributed when it is applied with friction; when applied by means of a brush no oil is necessary.

The polish is applied to the wood by saturating wadding with it, and inclosing this in a piece of fine, soft rag; the latter acts as a filter to the polish and prevents any loose portions of the wadding adhering to the work. If the polish is thus applied in a straight direction it would soon show up in ridges; consequently it is applied with a circular motion.

The wadding inclosed in rag is called a polish rubber. When applying the polish from it to the wood it requires only slight pressure to cause the polish solution to ooze out of it through the rag; and in order to enable it to work freely, without stickiness or a dragging feeling, a spot or two of linseed oil is applied to the face of the polish rubber each time it is charged with the lac solution. The circular motion by which it is applied creates friction, and this constant friction, with oil as a lubricant, imparts a gloss. The more the lac solution is applied the thicker a surface is built up, and the more the friction imparted the sooner the gloss becomes a shine.

The inexperienced worker would find it an apparently never-ending job thus to build up a perfectly level surface on woods of a coarse, open grain, such as oak, ash, elm, rosewood, walnut, and some varieties of mahogany; consequently it is a common practice for amateurs and professionals to use a wood grain-filler first, the object of this being not only to fill up the open grain and thereby form a more solid foundation, but to save an unnecessary quantity of liquid polish and the labor of its application.

There are several patented preparations on the market for this purpose. A mixture of finely crushed whiting—made into a stiff paste, like thick paint, and coloring pigments added to remove its whiteness, and more closely resemble the wood it is to be used upon—is also very much used.

The liquid polish is generally about from four to six ounces of orange shellac dissolved in one pint methylated spirit—a preparation which answers well for the general run of furniture goods. On light woods or work that contains inlaid designs—or for any other reason is desired to be finished with a transparency free from the slightly orange tint given by the use of orange shellac—a bleached shellac, commonly called "white shellac," is used instead.

Timber in Persia

The extensive forest lands of Persia have for some time attracted the attention of Russian timber handlers, a number of whom have formed themselves into a company for their exploitation, says the Financier. Persian timber extends from Astara to Barfush. The forest lands cover a slope running parallel with the mountain range in the direction of the Caspian sea, and the zone of the forest is about 10 to 60 versts (verst= 0.663 mile) wide. The principal trees that grow on that slope are oak, walnut, palm, etc. The first Russian timber enterprise in Persia took form in 1880, although not much has been done with it since. Russians are paying particular attention to the number of palm trees there, and a parcel sent into Europe fetched very good prices. The company named is negotiating with the Persian government for a 25-year monopoly in the exportation of this wood. At the same time other timber handlers are exporting to Russia and Europe generally walnut and oak staves, but the opening of this business did not prove particularly profitable. The oak timber and staves sent to Europe had to compete with Hungarian, Roumanian, Turkish, and other relatively cheaper woods. The demand was not strong and the freight was high.

In the year 1906 a group of timber dealers, who had leased a considerable quantity of good forest land in Persia, handed their business over to a Vienna syndicate called the Franco-Persian Syndicate. This concern, however, did not succeed. In 1909 a scientific investigation of the Persian forest lands took place, and the trees found there were described and their qualities and quantities defined. One thing appears to have been established by this investigation, namely, that the Persian oak is inferior only to the Siberian oak.

A supply of oak is a question of particular interest, for the demand has rapidly increased of late, resulting in the rapid diminution of the growing supplies, so that further reserves, such as those disclosed in Persia, awaken a widespread interest. The cubic foot of oak wood, which once sold at 13 or 15 cents, now sells readily at 30 or 36 cents, and a thousand oak staves at $97.33 to $99.76. Persian timber may be divided into two categories, from the exploiter's point of view. The first lies in a zone of from 20 to 25 versts on the Caspian sea, and the second from 20 to 26 versts farther inland. This latter must wait the laying of railways before it can be turned to profitable account.

The "Price" Fallacy

A concern that buys machinery on price alone, invariably regrets the bargain. Machinery manufacturers cannot do business at a loss. They must get a price that will allow them a fair profit. A man that buys on price generally gets just what he pays for.

It is the experience of the most successful buyers that the high-priced articles are the biggest values, according to Berlin Quality. Many things are to be considered in buying a machine besides its first cost. There is the quality of work, the speed at which it can be produced, the daily upkeep expense, the ability of the machine to stand up to a daily strain covering a period of years.

Many machines are now sold on a 30-day trial basis. This applies to the cheapest as well as the higher priced article. Here's where the buyer often makes a mistake. He installs a cheap machine on account of the 30-day trial agreement. The reliability and durability of a machine can only be determined at the end of the life service of any tool. That is a matter of history that every buyer should take into consideration—the reputation on which a quality machine stands.

Some months ago a woodworking concern was in the market for a moulder. Inquiries brought a number of salesmen to their office. After the buyer had listened to each man, he finally placed his order for the lowest priced machine. His reason for doing this was that the manufacturer agreed to a 30-day trial, guaranteeing the tool to do as good work as any other on the market.

In due time the moulder was installed and for thirty days it worked satisfactorily. But after ninety days the machine showed its true worth. The strain caused by forcing it to produce as much and as good work as higher grade machines, resulted in a weakening of the different parts. In a short time the machine was full of vibration—and required the constant attention of the operator to keep it in alignment. Six months after the buyer had placed his order for this low-priced tool he gave an order to another manufacturer for a high-grade moulder. This time he did not let price warp his judgment.

No manufacturer of machinery will deliberately place a prohibitive price on his product. When a firm refuses to sell you a machine at a price as low as some will, you may depend upon it that there is something in that machine that the other has not.

Manufacturers of high-grade machinery are equipped to manufacture at less cost than those who make a specialty of building tools to sell on price alone. Therefore, every dollar invested in a high-grade machine returns a dollar's worth of quality.

Hardwood News Notes

MISCELLANEOUS

The Long-Bell Lumber Company, Kansas City, Mo., has filed statement showing an increase in capital stock from $10,000,000 to $15,000,000.

The Jasper Furniture Company, Jasper, Ind., is erecting an addition to its factory.

The Ray H. Bennett Lumber Company, Inc., has been organized at North Tonawanda, N. Y., the capital stock being $200,000. The incorporators are: R. H. Bennett, H. F. Schad, North Tonawanda, and H. E. Webster of Buffalo, N. Y.

The Rocky Creek Lumber Company will rebuild the burned plant at Pansy, Ala., at a cost of $50,000.

The Porterwood Lumber Company, Porterwood, W. Va., was incorporated with a capital stock of $100,000 to develop 5,000 acres of hardwood timber, and will erect a sawmill of about 35,000 feet daily capacity.

The Kentucky Log Company, Cincinnati, O., has been formed by Edward O. Robinson, Frederick W. Mowbray, James A. Walsh, Arthur Earl Hart and Harry N. Welling. Capital stock is $30,000.

The Howell-Gilmore Manufacturing Company has been organized at Lomax, Ill., with a capital stock of $50,000. The company will manufacture agricultural implements.

The Fidel Ganahl Lumber Company of St. Louis, Mo., has changed its name to the Ganahl Lumber Company.

The Bishop-Whaley Lumber Company has been organized at St. Louis, Mo., to do a wholesale hardwood lumber business. The company is capitalized at $6,000 and will have offices in the Benoist building.

The John Theurer Wagon Works have been incorporated at New York City with a capital stock of $20,000.

The Appalachian Lumber Company has been organized at Asheville, N. C., with $12,000 capital.

The Kanawha Lumber & Woodworking Company has been incorporated at New York City with a capital stock of $6,000.

The Eli D. Miller Company, manufacturer of folding beds, located at Evansville, Ind., filed a petition in bankruptcy, the assets being $34,000 and the liabilities $47,000. It is expected the company will pay fifty cents on the dollar.

The Clark-Moreley Company has been incorporated at Grand Rapids, Mich., with a capital stock of $75,000.

The Cape Baker Hardwood Lumber Company is the style of a newly organized concern at Ava, Mo.

The Germania Manufacturing Company has started business at Wilmington, Del., for the purpose of manufacturing furniture. This company has a capital stock of $200,000.

The National Mill Work & Supply Company has started in business at Cleveland, O., with $10,000 capital.

The Findlay Table Manufacturing Company of Toledo, O., has been put in hands of E. L. Groves as receiver.

The Unique Furniture Manufacturing Company of Zanesville, O., recently bankrupt, is now in the hands of Frank A. Hunter as receiver.

The Morgan Run Land & Lumber Company has been organized at Clarksburg, W. Va.

CHICAGO

C. L. Willey, the well known manufacturer of fancy wood veneers and lumber, whose mills are located at Chicago, sailed from New York on July 1, accompanied by his wife, for a three months' trip to England, France and Germany. Mr. Willey will motor through these three countries, having shipped his machine ahead. In addition to the business side of the trip, which involves his regular purchases of high-grade fancy wood of various kinds, Mr. and Mrs. Willey will devote considerable time to sight seeing and other pleasure seeking.

Definite plans have been made for the joint annual picnic of the Lumberman's Association of Chicago and the Lumbermen's Club of Chicago, as announced in the last issue of HARDWOOD RECORD. The picnic will take place at Northwestern Park, Des Plaines, Ill., on July 15, this park being thirty minutes ride from Chicago on the Chicago & Northwestern Railroad. A special train will leave the Northwestern depot at 9:45 a. m., stopping at Clybourn Junction, and returning at 6:30 p. m. There will also be a special car for the use of the members on the 1:30 p. m. train returning. Meals can be bought at the park.

The first number of the first volume of the Official Bulletin of the National Hardwood Lumber Association, covering the month of June, has just been issued. The bulletin covers the recent sixteenth annual convention of the association and various other pertinent information.

HARDWOOD RECORD had the pleasure of a call a few days ago from J. M. Maris of the Maris & DeWitt Lumber Company, Philadelphia, who is visting his daughter in Chicago.

J. A. Levings, president of the Moorhead Manufacturing Company, Moorhead, Miss., is spending this week with the local trade.

The National Wholesale Lumber Dealers' Association has just issued a pamphlet, the receipt of which is hereby acknowledged, giving a list of members, officers and various committees, and the board of trustees of the association.

The Lawndale Sash & Door Company has been incorporated at Chicago with a $15,000 capital stock.

Wiederhold Lumber & Manufacturing Company is the style of a new incorporation at Park Ridge, Ill. The company has a $2,000 capital.

C. H. Worcester, head of C. H. Worcester & Co., Association building, Chicago, sailed for Europe on July 8 for a two-months' tour. Mr. Worcester was accompanied by his wife, and together they will make an automobile trip through England and Scotland.

M. L. Pease of the Galloway-Pease Lumber Company, Poplar Bluff, Mo., spent several days of last week with the Chicago trade and seemed to be in rather a favorable frame of mind as far as the prospects for the lumber business are concerned.

H. W. Nordyke of the Adams & Raymond Veneer Company of Indianapolis spent July 7 with the local trade, having spent the three-days' holiday in this city.

A. H. Vaughan, secretary of Lewis Thompson & Co., Philadelphia, spent last week with the local trade.

The annual summer dinner of the Chicago Furniture Manufacturers' Association was held on Thursday evening, June 26, at the Blackstone hotel, Chicago. Various notable speakers were present and many matters of interest to the trade were brought up.

Chief Forester Henry S. Graves, Capt. J. B. Adams, in charge of operations; W. D. Greeley, chief of silviculture; Earl H. Clapp, assistant chief of silviculture, and O. T. Swan, head of the office of industrial research, all of the Forest Service, Washington, D. C., have been in the city for the past few days. Mr. Graves, Captain Adams and Mr. Clapp are headed for the national forest in the west, while Mr. Greeley and Mr. Swan are going East.

NEW YORK

The war of the non-union trim manufacturers against the Carpenters' Union goes merrily on, and last week saw a new case filed similar to the Bossert and Newton cases. The Tisdale Lumber Company of Astoria was granted a temporary injunction against the unions, restraining them in their chief activities, which, it is alleged, were persuading union carpenters not to work on material furnished by the Tisdale company. The Tisdale shop has always been an open one, some of the men being members of the union and some unaffiliated.

It was announced from the offices of the Atlantic Coast Lumber Corporation in this city that the board of directors has authorized the building committee to proceed with the rebuilding of the plant recently destroyed by fire at Georgetown, S. C. The announcement was made following the directors' meeting.

The French Broad Lumber Company has opened an office in this city at 1389 Broadway under the management of Gouverneur E. Smith, who has been identified with the wholesale trade of the Metropolitan district.

Walter E. Johns of the Johns-Mowbray-Nelson Company, hardwood wholesaler of Cincinnati, was a visitor in New York during the fortnight.

E. C. Mershon of W. B. Mershon & Co., resaw manufacturers of Saginaw, sailed from New York on the French line steamer "France" for his usual vacation abroad. He was accompanied by his sister, Miss Elsie Mershon.

R. H. Downman, prominent New Orleans lumberman, and the new president of the National Lumber Manufacturers' Association, was in New York recently in the interest of business.

Raymond W. Storm, brother of George H. Storm, and Frank D. Roylance were recently admitted to partnership in George H. Storm & Co., prominent hardwood flooring distributors of this city. Both the new partners have been identified with the business for many years, and Mr. Roylance has been associated with Mr. Storm practically from the latter's start in the business at Bridgeport, Ala., over twenty years ago. While George H. Storm has not retired from business, the new partners will relieve him of a vast amount of business detail and he will devote much of the future to travel and his favorite pastimes. It is just fifteen years since Mr. Storm began on his own account in this city, and he has built up a business in hardwood flooring that gives his firm a high place in that line of activity. The success of the business has been due to his energy and industry, and now with some of the responsibility on other shoulders he can take his vacations without worry.

BUFFALO

The receipts of lumber at this port ran over 5,000,000 feet ahead of last year on July 1, the figures being respectively 32,806,028 feet and 27,466,289 feet.

Jackson & Tindle are setting up their double band mill on the big purchase made in northern Ontario last year and expect to have it running early in July. The tract is operated under the corporate name of the New Ontario Colonization Company and is largely timbered with spruce. Quite an amount of lumber has already been sawed and shipped from there.

H. L. Abbott, manager of the Atlantic Lumber Company, who lately took a lease of part of the Scatcherd yard, now has over 1,000,000 feet of various hardwoods piled up there.

James A. White has given up his office in the White building and will now manage the eastern sales department of the W. H. White Company as before, retaining his Buffalo residence.

F. M. Sullivan has returned from an eastern business trip, finding business rather quiet, although the yard is getting in quite a stock of hardwoods, especially oak, and shipping out an amount of brown ash.

Anthony Miller states that the hardwood trade is rather dull and that not much lumber is being received on this account. Buyers, he states, are holding off just now in the hope of securing stock at lower prices.

The Standard Hardwood Lumber Company calls business a little quiet this month; through the East and in Canada there is a holding up of orders on account of a money market stringency.

O. E. Yeager's yard has been laying in stocks of wide poplar and maple at favorable prices. The receipts in these woods have been quite large lately.

PHILADELPHIA

At a recent meeting of the creditors of the Floyd-Olmstead Company a committee composed of Joseph H. Sykes, representing W. A. Wilson & Sons, Wheeling, W. Va., chairman; J. S. Williams, an attorney, and Arthur W. Kent of the J. S. Kent Company, was appointed to close up the affairs of the company.

George E. Bartlett, formerly sales manager of James Strong & Co., has set up in the wholesale lumber business for himself at 522 North American building. He will also act as special agent for the Buck & Snodgrass Lumber Company, Johnson City, Tenn.

Sheldon G. Magargal, son of Samuel H. Magargal, 319 Montrose street, died June 27, aged twenty-five years. He was associated with his father in the lumber business.

The W. R. Taylor Lumber Company reports sales equal to usual trading at this time of the year. It confesses to a want of vim in the buying market, but is optimistic as to outlook.

Robert W. Schofield of Schofield Brothers, who recently returned from a trip to the Saltkeatchie Lumber Company, Schofield, S. C., which is controlled by his firm, says the plant has been shut down for two weeks for semi-annual repairs. The company has a good stock of desirable lumber on hand and is making no effort to get rid of it. Business is more quiet just now, but this is the generally accepted quiet season.

Frank E. Schofield is spending some time at the Honaker Lumber Company's plant in Honaker, Va. J. B. Lahr, the popular New England salesman of this house, was recently operated upon for appendicitis. He is rapidly improving and hopes soon to be in the field again.

The Philadelphia Wholesale Lumber Dealers' Association will hold its annual summer meeting and outing at the White Marsh Valley Country Club house, through the courtesy of J. W. Turnbull of the J. W. Turnbull Lumber Company, on July 10. A golf game, which will be arranged for those inclined to this sport, will start at 1:30 p. m. A dinner will be served at 6:30, after which the regular meeting will be held.

W. H. Wyatt, of the Jackson-Wyatt Lumber Company, is more opti

Timber Values

Are not and never have been affected by a two weeks' or two months'

Slump in Lumber Prices

Men of broad vision, men who have changed a vocation into the greatest industry in the land, have not permitted temporary conditions to warp their judgment.

Their timber selections have been made carefully. They sought and secured the best information regarding values that could be obtained and, acting on this information and their own initiative, their timber investments have brought them manifold returns.

Why not investigate Western Opportunities this year? The co-operation of our great organization is at your command.

James D. Lacey & Co.

Timber Land Factors

Chicago, Ill., 1750 McCormick Building
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VANDEN BOOM-STINSON LUMBER COMPANY
Manufacturers Southern Hardwoods
Quartered Oak a Specialty
Memphis Tennessee

TIMBER ESTIMATES
REPORTS INCLUDED
TOPOGRAPHICAL MAP, DETAIL ESTIMATES & WRITTEN REPORT
GARDNER & HOWE
ENGINEERS
Clarence W. Griffith Department Manager, Porter Building. Memphis, Tenn.

The Mossman Lumber Co., Inc.
Manufacturers
plain and quartered red and white oak, ash, gum and poplar.
ALSO FULLY EQUIPT DIMENSION PLANT
Memphis, - - Tenn.

mistically inclined as to outlook than a fortnight ago. Things are brightening and orders are coming in more liberally.

W. J. Mingus of Mingus & Rutter admits a slacking up in business of late, attributable mainly, he thinks, to the persistent conservatism in buying. Judging from the stock pile at mills, he is confident the fall will show an advance trading and firm prices.

The Philadelphia Lumbermen's Golf Club has decided on July 16 for the next game. Through the courtesy of William H. Fritz of W. H. Fritz & Co., it will be played on the links of the St. David's golf grounds.

L. H. Phippin of Owenton, Va., was a recent visitor to the local trade.

Ralph Souder of Hallowell & Souder says the total of June shipments was the biggest his firm ever had, and orders are still coming in. A good fall business is looked for. Mr. Souder has established his family for the summer at Bay Head, N. J., where he will spend the week-ends.

J. E. Troth, president of the J. S. Kent Company, says business so far this year is not behind that of last year, but trading has fallen off of late. Arthur W. Kent, secretary and treasurer, is rusticating for a few weeks in the Catskill mountains.

W. S. W. Kirby of the Kirby & Hawkins Company reports increased business in railroad supplies but a slowing up in the general lumber line. Tariff tinkering once over, he thinks things will come around all right.

The Monarch Lumber Company has removed its main office to the mill of the Haddock-France Lumber Company, Mt. Sterling, N. C. A branch office, which will be maintained in the Harrison building, will be visited weekly by the secretary and treasurer, Howard B. France.

PITTSBURGH

The Mutual Lumber Company reports hardwood business in general very satisfactory, although it is somewhat spotted. Buyers have to be hunted up, but when they are found they seem ready to pay pretty good prices for lumber.

The Kendall Lumber Company is doing a splendid business with the mining concerns. Its railroad trade has also been remarkably good the past year.

The Duquesne Lumber Company finds its eastern trade improving steadily. There were breaks in the ranks of buyers, according to Sales Manager G. C. Adams, but there is very much to be thankful for notwithstanding.

The Acorn Lumber Company has long ago broken last year's records and has contracted for the best stock of hardwoods that it has ever had to sell. President Denkoff is very well pleased with the year's business.

The Allegheny Lumber Company made the first six months of this year break over all preceding records. Treasurer Rodgers says that factory trade in hardwoods has been good.

C. E. Breitwieser & Co. are pushing their hardwood business very successfully. They are getting right to the front as hardwood distributors, due largely to the fact that they know how to secure and handle splendid stocks of hardwoods to good advantage for the buyers.

The West Penn Lumber Company, according to R. H. Stoner, finds business keeping up well and general demand very good. Its records show a nice increase for the year, with a very responsible lot of buyers.

The W. P. Craig Lumber Company finds business in general satisfactory and has been having a very nice trade in hardwoods all summer. Mr. Craig anticipates a very strong buying movement in the fall.

The American Lumber & Manufacturing Company notes a scarcity of hardwoods and the tendency to pay pretty good prices for good stock. Manager Brown of the hardwood department of this company has been out making several scouting trips lately.

BOSTON

The Quincy Lumber Company has been organized with a capital stock of $100,000. The incorporators are Benjamin Pope, Edgar W. Cottle, Chester E. Tenney and Ralph J. Evans. Benjamin Pope and Edgar W. Cottle are of the old firm of Curtis & Pope Lumber Company and are interested in this company at the present time.

Among the lumber companies to file their corporation returns at the state house during the past few weeks have been the Skillings, Whitneys & Barnes Lumber Company, Boston; the Perkins Woodworking Company, Boston, and the Shepard & Morse Lumber Company, Boston.

One of the most important transactions in the lumber business in New England for many years has just been consummated. The firms of Hornblower & Weeks, Boston bankers, and Stone & Webster, also of Boston, have purchased all of the stock of the Connecticut Valley Lumber Company. This company has an authorized issue of $3,000,000 in bonds, of which $2,880,000 is outstanding and $2,500,000 in capital stock. The Connecticut Valley Lumber Company was organized several years ago by the late George Van Dyke. Mr. Van Dyke was killed in an automobile accident in Turners Falls in 1909. Shortly after his death Hornblower & Weeks became interested in the company and a member of their firm, James J. Phelan, was elected president of the Connecticut Valley Lumber Company. It is understood that the new owners will continue operations and will also increase their holdings of timberlands in New England. The company is one of the largest handlers of spruce in this country.

The Lansing Lumber Company, Providence, R. I., has recently moved into its new office building. Connected with this building is a large storage building of modern construction.

D. T. Pepin has opened a lumber yard in Easthampton, Mass. Mr.

Pepin has been a contractor and builder in Easthampton for several years.

The Berlin Mills, which were destroyed by fire a few weeks ago at Berlin, N. H., will be rebuilt. The company plans to erect five mill buildings, all of reinforced construction.

BALTIMORE

Martin C. Hughes of the Cummer Lumber Company, which has sales offices in New York and large mills at Jacksonville and Sumner, Fla., canvassed the trade in Baltimore last week. He stated that he had met with very satisfactory results in the course of his travels during the past few weeks, the demand having held up very well.

O'Keefe Brothers, manufacturers of parlor frames and couches, who have been operating a factory at 1008 South Fremont avenue for a number of years, have moved to their new plant on Frederick road and Gwynn's Falls. The firm has added the manufacture of dowels to its products, having discovered that a good demand exists here for them. The supply has heretofore come from Michigan and other distant points, but the factories there have been unable to meet the local requirements, long waits in the filling of orders having been the experience of buyers. The firm says it already has enough orders to keep the dowel machinery running for some time.

J. Ross Hopkins, a former Baltimorean, but now located in the Hood river district in Oregon in the lumber business, is here on a visit to relatives. Mr. Hopkins was formerly connected with Thomas Hughes and left Baltimore about a year ago for the Far West. He expresses himself as highly pleased with his experience in the new home.

Stephen S. Mann of Mann & Parker, Inc., Continental building, has been on a southern trip for the last three weeks, having visited mills in Virginia, North Carolina, South Carolina, Georgia and Florida. He reports that he has taken up large quantities of lumber, some of which is being shipped direct from the point of origin, and that his trip generally has been very successful.

The factory of the Nansemond Truck Package Company at Suffolk, Va., was completely destroyed by fire early on the morning of June 30. The blaze was discovered in the drying room and spread rapidly through the large plant which was filled with dry veneering. The loss is estimated at not less than $300,000.

George P. Franklin, representing Richard P. Baer & Co. of Baltimore at Hinton, W. Va., was in Baltimore this week to confer with members of the firm relative to various business matters. Mr. Franklin was quite enthusiastic about trade conditions in his territory and reported much activity in the way of mill construction and the movement in hardwoods.

Ralph E. Sumner of the Sumner Lumber Company, New York City, visited hardwood men in Baltimore last week. He stated that he had in the past three months covered practically every state east of the Mississippi river and some of the states west thereof, visiting every section and getting closely in touch with the mill men and the trade generally. He expressed the opinion that the lumber trade was on the eve of a recession in prices, and reported that the mills of the Memphis section had begun to cut down the production in an effort to curtail the offerings and in this way prevent any decline in the quotations. Notwithstanding this action, he felt that values might ease off in the near future, though he was not able to state that a recession had actually taken place up to this time.

COLUMBUS

At Urbana, O., Barton O'Neil, aged seventy-eight years, died at his home recently from heart failure. He was engaged in the lumber business during the greater part of his life. He is survived by his widow and five children.

The sawmill and planing mill of the Crook, Son & Co. at Hicksville, O., was recently destroyed by fire causing a loss of more than $5,000. A large handle factory belonging to the company, which stood only a short distance away, was saved.

The American Box Company of Cleveland, O., is negotiating with the village of Geneva, O., relative to locating a plant at that place. It is stated that the business of the company requires larger facilities.

Building operations in Columbus and in the smaller cities and towns in Ohio are quite active. Many of the buildings in process of construction and in projection are of the dwelling or apartment type. On the other hand, quite a number of larger buildings are being constructed.

R. W. Horton, sales manager for the central division of the W. M. Ritter Lumber Company, says trade in all lines of hardwoods is holding up extremely well and that the month of June was one of the best in the history of the company. All hardwoods are in good demand and all grades are moving uniformly. Mill stocks are not very large. Yard stocks are only fair and steady buying is anticipated from this time on.

W. M. Ritter, head of the concern bearing his name, has returned recently from an inspection trip of many of the company's mills in the South. He is arranging for his annual trip to England and the continent later in the summer.

John R. Gobey of John R. Gobey & Co. says trade in hardwoods is holding up well under the circumstances and practically no weakness has developed as yet. He looks for a steady demand for the remainder of the building season at least.

C. G. McLaughlin of the Imperial Lumber Company says trade is holding up well and is as good as could be expected under the circumstances.

Quartered Oak Veneer

¶ Our stock is sawed or sliced from genuine Forked-leaf White Oak.

¶ If you call you won't leave without buying as we have the right figure for the most exacting requirements.

¶ Our perfect machinery and supervision make perfect manufacture.

Call or write now and have a good choice

Fred W. Black Lumber Company
Chicago

Take Douglas Park "L" to 40th Ave. and walk one block south



¶ Fitzgibbons & Krebs Patent Elevated Traveling Derrick propels itself on 28-ft. gauge track.

¶ No guy wires.

¶ Write to O. M. Krebs, Mallory Branch, Memphis, Tenn., or to P. F. Fitzgibbons, Chattanooga, Tenn., for pamphlet fully illustrating and explaining the derrick.

Also ask for list of users.

He believes that the volume of business will show an improvement after the inventory period is over.

The Whitacre Lumber Company, which recently moved its offices from 451 West Broad street to the Columbus Savings & Trust building, is having a nice run of business. The wholesale yard on McDowell street is being closed out.

The Doddington Company has taken the office building at 451 West Broad street, formerly occupied by the Whitacre company.

The A. C. Davis Lumber Company, located on South High street, reports a fair run of business in hardwoods with quotations well maintained in every particular.

INDIANAPOLIS

The Grabill Lumber Company, Grabill, Ind., has increased its capital stock $4,000.

Articles of incorporation have been granted by the secretary of state for the Buddenbaum Lumber Company of this city, for many years conducted as a partnership. The capitalization is $50,000. There is no change in the management.

Building operations for the six months ending June 30 in the city aggregated $5,110,907, as compared with $3,996,050 for the same period of last year. In June building operations were $952,025, as against $1,038,150 for June, 1912.

The Beech Grove Lumber Company, Beech Grove, Ind., has recently increased its capital stock from $10,000 to $25,000.

An extensive line of handles will be manufactured by the Richmond Handle Company, just organized at Richmond and incorporated with an authorized capitalization of $10,000. Those interested in the company are E. C. Wolfe, H. G. Brentlinger and C. H. Brentlinger.

After having been conducted for twenty-one years as a partnership, the Interior Hardwood Company of this city has been incorporated with an authorized capitalization of $100,000. There is no change in management and the stockholders are Charles Latham, Henry Latham and C. H. Comstock. The company manufactures hardwood flooring.

Following a short illness, Nicholas Hoffman, manager of the export department of E. C. Atkins & Co., died at his home in this city on June 20. He was thirty-six years old and came to Indianapolis from Germany in 1900. A widow in this city and a mother and brother in Germany survive. Mr. Hoffman was Indiana representative for the Automobile Touring Club of France.

WANTED

All Kinds of High-Grade

HARDWOODS

S. E. SLAYMAKER & CO.

Representing
WEST VIRGINIA SPRUCE LUMBER CO.,
Cass, West Virginia.

Fifth Avenue Building,
NEW YORK

CINCINNATI

Hardwood Manufacturers and Jobbers

E. C. BRADLEY LUMBER CO.
HIGH GRADE WEST VIRGINA HARDWOODS
GOERKE BUILDING

CONASAUGA LUMBER CO.
MANUFACTURERS HARDWOOD AND PINE
FOURTH NATIONAL BANK BUILDING

Johns, Mowbray, Nelson Company
OAK, ASH, POPLAR & CHESTNUT
GUM AND COTTONWOOD

C. CRANE & CO.
MANUFACTURERS HARDWOOD LUMBER
1739 EASTERN AVENUE

ARE YOU ALIVE

to the "Service" (in all its details) you can secure from us on Oak, Gum, Poplar and other Hardwoods?

BETTER GET IN TOUCH WITH US

THE M. B. FARRIN LUMBER CO.

Richey, Halsted & Quick
HIGH GRADES IN SOUTHERN HARDWOODS A SPECIALTY

MEMPHIS

There is unusual activity in building operations here and on this account there is a good demand for building material of practically all kinds. There are several new buildings which have been projected during the past few weeks for which permits will be taken out in the immediate future. Indications are that there will be unusual activity in building circles throughout the summer and this is regarded as a very favorable condition by those engaged in the supplying of building materials. A number of these buildings will be finished in hardwoods.

The sixty-mile extension of the Rock Island system from Camden to Malvern, Ark., has been completed and the first train run over the road. This line taps a section which is very rich in timber resources and will prove an important factor in the development thereof. There are a number of woodworking enterprises at both Camden and Malvern, as well as at intermediate points.

Bank clearings at Memphis for the first six months of 1913 were the second largest on record, being exceeded only by those for the corresponding period in 1912. The decrease, compared with that time, was only $1,200,000. A feature of the general business for the period in question was the decided gain in transactions on the part of lumber interests, which enjoyed larger and more profitable business than for several years. If all interests had fared as well as the lumbermen there would have been a large increase instead of a decrease in bank clearings.

The Cate-Lanive Company, capitalized at $50,000, has been incorporated under the laws of Arkansas, with headquarters at Jonesboro. It will engage in the general cooperage business. H. L. Lanive is president, W. W. Cate is vice-president and J. T. Slagle is secretary. The firm has mills at Corning and Blytheville and the men connected with the company are practical cooperage men.

Actual preparation for the building of the new bridge of the Rock Island system across the Mississippi river at Memphis has already begun. This new bridge will prove a very important addition to the traffic facilities of Memphis and is regarded very favorably on this account by lumber interests which have suffered more or less from traffic congestion during the past few years. The management has already advertised for bids for a very large quantity of lumber to be used in the construction of a fleet of barges necessary to the foundation work for the new structure. The bridge itself will also require a considerable amount of lumber and this will be supplied by sawmill interests in Memphis or the Memphis territory.

The Valley Log Loading Company is loading timber freely on the Yazoo & Mississippi Valley line of the Illinois Central and it is likewise loading considerable timber on the Memphis-Marianna cut-off of the St. Louis, Iron Mountain & Southern. Much of this timber is coming to Memphis over both lines, though some of it is for mills at intermediate points. The amount of timber being loaded by the Valley Log Loading Company is considerably in excess of that loaded at the same time last year.

The weather in the Memphis territory during the past fortnight has been exceptionally favorable for work in the woods, which has made very satisfactory progress. Practically all the mills in Memphis and the immediate Memphis territory are well supplied with logs and the outlook for an adequate timber supply is considered exceptionally good.

NASHVILLE

The Tennessee Hardwood Lumber Company, which recently absorbed the Althauser-Webster Weaver Company, has effected permanent organization by the election of the following officers: Thomas B. Johnson, president; D. Weaver, vice-president and treasurer, and William Althauser, secretary. The main office will continue in West Nashville. The company has recently started a mill at Barnesville, Tenn., with daily output of about 8,000 feet of lumber. The company has incorporated with authorized capital of $50,000.

No settlement has yet been effected of the strike of 300 carpenters

employed by the Edgefield & Nashville Manufacturing Company. The strikers demand a "closed shop" and eight hour work days.

The Nashville Builders' Exchange had a successful outing at Priestly Springs, on the Cumberland river, with about 500 in attendance. The exchange is gaining rapidly in strength under the administration of President R. T. Creighton.

The North Fork Lumber & Timber Company of Jackson, Ky., has started a mill at Yerkes, Ky., and is turning out oak and poplar. S. J. Young is at the head of the company.

The New River Lumber Company has filed a bill against the Tennessee Railroad Company, having the latter placed in the hands of a receiver. Byrd M. Robinson of New York is receiver. The liabilities are about $31,000.

Local building operations during June showed a material increase over last year, the city building inspector issuing permits for improvements to cost $272,859, against $92,027 for the corresponding month of 1912.

A. B. Ransom and family have gone to Europe for a stay of several months.

With his family, S. Lieberman of Lieberman, Loveman & O'Brien, has gone to Babylon, L. I., for an extended stay.

W. J. Loveless, Jr., secretary of the Southwestern Veneer Company, Cotton Plant, Ark., which is developing about 5,000 acres of timberland near Cotton Plant, was in Nashville recently and reported that his company is in prosperous condition.

The Nashville Lumberman's Club is having its annual outing, the members being the guests of Charles M. Morford, president of the club, at his country place near McMinnville. The lumbermen left on July 3 for that place, and will remain about ten days. Mr. Morford's place, Camp Lively, is located on Collins river. About twelve or fifteen members of the club will enjoy the outing.

LOUISVILLE

Memphis lumbermen have complained to hardwood men in Louisville that the Louisville & Nashville is not living up to some of the requirements of the Interstate Commerce Commission in the Tennessee city with regard to milling-in-transit. The matter is being investigated with a view to co-operation.

The Interstate Commerce Commission will have a hearing in Louisville July 18 for the purpose of taking evidence in the case of local hardwood concerns against railroads running into Louisville from the South and out of Louisville to the North. The question involved is chiefly the application of a bridge toll on inbound lumber.

The Magnolia Garden, a handsome resort on Third avenue, has been used for a recent outing of the Louisville Hardwood Club, which has a decided leaning for the chicken dinners of the Eight-Mile House, apparently, as it has met there twice of late.

P. G. Booker of the Booker-Cecil Company is ill with typhoid fever at his home at Harrod's Creek. His physician does not regard his condition as serious, however.

Colgan Norman, son of Barry Norman, vice-president of the Norman Lumber Company, has been in New York, where he submitted to an operation to relieve a muscular defect of the eye. The operation was a success.

Edward S. Shippen, president of the Louisville Point Lumber Company, recently returned from a short vacation at French Lick Springs, Ind. He was accompanied by Mrs. Shippen and his daughter, Olive.

While the vacation season and the heat always interpose to prevent business from being as good in midsummer as it is at other seasons of the year, local lumbermen insist that they have no complaint to make, and that business is well up to standard; in fact, better than it usually is at this season of the year. Quartered oak has been especially good.

The complaint of local hardwood concerns against the increase in rates by the Louisville & Nashville, recently put into effect from points north of Decatur, Ala., to Louisville, will be filed with the Interstate Commerce Commission shortly, arrangements to that effect having been completed. From the number of letters received by lumbermen north of the river by local hardwood men, the raise will be opposed by nearly every lumber interest.

Horatio Fullenlove, who had been connected with various lumber concerns in this section, died recently at his home in Louisville at the age of forty-eight. He is survived by his widow and three children.

Plans are being discussed by Louisville lumbermen for an investigation of the cost-of-doing-business problem. The Louisville Hardwood Club has taken the matter up at recent meetings, and plans to have a set of questions drafted upon which to concentrate investigation. Members of the club will submit reports, taken from their books, and in this way it is hoped that some general conclusions may be reached which will be of considerable value. Leroy Olcott of the W. P. Brown & Sons Lumber Company, who is an expert accountant, is given credit for having suggested the idea.

The local mill of the C. C. Mengel & Brother Company has been running at night recently, indicating that the demand for mahogany is holding up in spite of the midsummer lethargy. The company has recently received a good many logs from its Central American producing stations, and is in good shape for a long siege of manufacturing.

The W. P. Brown & Sons Lumber Company is now shipping gum, as well as other woods, from its new mill at Fayette, Ala. The company is making its first venture in gum, and is much pleased with the results it has been able to get thus far, the quality of the wood cut up at Fayette being exceptionally high.

Will McLean, president of the Wood-Mosaic Company, announced recently the purchase of new sawmill equipment for the plant which is to replace that recently destroyed at Highland Park, Ky., from the Filer & Stowell Company of Milwaukee. The new plant will be largely fireproof, and will be double the capacity of the old. It will be ready for use by September.

ST. LOUIS

Building operations during the month of June were satisfactory and 807 building permits were issued for new buildings and repairs to cost $2,296,415, which indicates a gain of about 14 per cent over the building operations of June, 1912. In the corresponding month last year 855 permits were issued for buildings costing $1,931,076.

The Garetson-Greason Lumber Company reports a fair volume of business, with a particularly good demand for oak. The company's mills are working full time.

The Liebke Company reports a good seasonable demand for every item on the list. Its mill, which was out of commission for some time owing to the breakdown of some of the machinery, is now working full time and is cutting up the logs which accumulated during the enforced idleness. It

Kentucky Lumber Company
MANUFACTURERS
POPLAR, PLAIN AND QUARTERED OAK, RED AND SAP GUM, ASH, CHESTNUT, BASSWOOD, HEMLOCK, WHITE PINE
Mills at
Burnside, Ky. Williamsburg, Ky.
Isola, Miss.
Sales Office
Cincinnati, O.

CINCINNATI
Hardwood Manufacturers and Jobbers

DAY LUMBER & COAL CO.
Mfrs. YELLOW POPLAR and WHITE OAK
GENERAL OFFICE—CLAY CITY, KY.

RIEMEIER LUMBER CO.
OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

SHAWNEE LUMBER CO.
HARDWOODS, WHITE PINE and HEMLOCK
Sales Office—South Side Station—C. H. & D. R. R.

JAMES KENNEDY & CO., Ltd.
OAK, POPLAR AND OTHER HARDWOODS
FIRST NATIONAL BANK BUILDING

The Kosse, Shoe & Schleyer Co.
WALNUT, OAK, AND OTHER HARDWOODS
103-4-5 CAREW BUILDING

OHIO VENEER COMPANY
Manufacturers & Importers FOREIGN VENEERS
2624-34 COLERAIN AVENUE

CHARLES F. SHIELS & CO.
SPECIALISTS IN WIDE STOCK
POPLAR, OAK, CHERRY, BIRCH

is receiving barges of logs all the time, the latest shipment being one of about 700,000 feet of ash.

A good seasonable trade is reported by E. H. Luehrmann of the C. F. Luehrmann Hardwood Lumber Company. Nearly everything in the hardwood line is being called for and the company is able to take care of all orders.

E. W. Blumer, sales manager of the Lothman Cypress Company, has just returned from an extended eastern trip. He states that prospects are fine for a big business through that territory this fall. He got several good sized orders during his trip. He also states that the Oshkosh factory is doing an excellent business.

The executive board of the Lumbermen's Club of St. Louis, at a meeting held June 27, put itself on record as recommending the continuance of the Commerce Court and the board voted to send telegrams to the Hon. Champ Clark, the United States senators from Missouri and also to the representatives from this state, asking them to vote to that effect when the matter came up.

Bluestone Land & Lumber Company
MANUFACTURERS
WEST VIRGINIA HARDWOODS
Soft White Pine, Oak, Poplar, Chestnut, Hemlock
Band Sawed Stock
MILL FACILITIES COMPLETE PLANING
RIDGWAY PENNSYLVANIA

AT HALF PRICE
STEAM SKIDDER AND LOADER COMBINED
Clyde Modern Equipment. Used about sixty days. Operations discontinued. No further use for it
For Particulars Write
GOGEBIC LUMBER CO.
GRAND RAPIDS, MICH.

SAWYER GOODMAN CO.
MARINETTE, WIS.
Mixed Cars of Hardwood, Basswood, White Pine and Hemlock, Cedar Shingles and Posts
We make a specialty of White Pine Beveled Siding and White Pine Finish and Shop and Pattern Lumber

The Tegge Lumber Co.
High Grade
Northern and Southern
Hardwoods and Mahogany
Specialties
OAK, MAPLE, CYPRESS, POPLAR
Milwaukee, Wisconsin

ARKANSAS

The Archer Lumber Company of Helena, Ark., is erecting a large hardwood sawmill at that place. The company purposes to have the plant in operation by Aug. 1. The new mill will give employment to about 100 men. The company has recently bought a large tract of timber in the southern part of Phillips county.

The Kentark Land & Timber Company of Pine Bluff, Ark., has recently been incorporated with a capital stock of $250,000. This concern is backed by Louisville and St. Louis capital and has for the chief stockholder W. C. Hudson of Pine Bluff. The company will do a general manufacturing business.

The Henry Wrape Company, manufacturer of cooperage supplies at St. Louis, Mo., has recently bought 2,000 acres of timber near Barber Lake, Ark. This tract was purchased from A. C. McComb of Assand, Wis. Mr. McComb has also recently sold 1,200 acres of timberland in White county, Ark., to J. J. Tally of St. Louis, Mo., the consideration being $24,000.

E. M. Arnold, formerly of Cherry Valley, Ark., recently purchased machinery for a new handle mill at Imboden. Mr. Arnold is an extensive timber worker and is favorably impressed with the growth of hickory in the Imboden vicinity. This new mill will probably be in operation for several years, as there is a large supply of material in that county.

The Gap Lumber & Stave Company of Caddo Gap, Ark., has recently filed its certificate of incorporation increasing its capital stock to $25,000.

MILWAUKEE

The John S. Owen Lumber Company of Eau Claire, Wis., one of the largest lumber companies in the state, has filed an amendment with the secretary of state increasing its capital stock from $500,000 to $1,000,000.

E. H. Gilkey, Edward Schofield and H. R. Miller of Shawano have incorporated the Gilkey Lumber Company of Shawano. The capital stock is $50,000.

The H. M. Johnston Lumber Company of Reedsburg has sold its business in that city to a newly organized company incorporated as the Reedsburg Supply Company. H. M. Johnston is president; C. E. Phillips, vice-president; J. S. Alexander of Wausau, secretary-treasurer. The capital stock of the new company is $75,000.

The Menasha Wooden Ware Company has resumed operations at its sawmill near Ladysmith. The large stock of logs is expected to keep the mill busy until near the end of the year.

Forest fires destroyed camp No. 5 of the Oconto Company recently, causing a loss of several thousand dollars.

Capt. J. D. Sarles of the gas boat Avis has been engaged for the past several weeks in picking up logs for the Wells Lumber Company of Menominee. The logs are those washed up on the beach on the east shore of Green Bay. They are rolled into the water, made into rafts and towed across the bay. Five men are employed in the work.

Albert H. Murphy, one of the well-known lumbermen and capitalists of Green Bay, has left with his wife and two sons for California, where the family will make its future home. Mr. Murphy, besides being interested in many business enterprises, was connected with the Murphy Lumber Company here since 1894 as manager, until the sawmill was sold to the Northland Lumber Company seven years ago.

Emil Durr, one of Milwaukee's pioneer lumbermen and a widely known business man of this city, died recently at his home, 345 Hanover street, aged seventy-three years. Mr. Durr was born in Milwaukee in 1840. His first business venture was with T. H. Judd & Co., lumber merchants. Later he formed a partnership with John Rupgee, establishing the first lumber yard on the Burnham canal. He was prominent in fraternal circles and held several public offices. Mr. Durr is survived by three children, two brothers and one sister.

William H. J. Kieckhefer, vice-president of the Kieckhefer Box Company and connected with a number of business enterprises, died at his home, 2904 Highland boulevard, June 30. Mr. Kieckhefer recently underwent an operation for cancer. He was fifty-six years old. He was a prominent Lutheran of this state, holding various offices in church organizations, and was well known in social circles. Mr. Kieckhefer is survived by his wife and eight children.

Louis F. Patrick, for more than forty years secretary and confidential man of Senator Isaac Stephenson, the Marinette lumberman, was overcome by heat in the streets of Washington on July 2 and died soon after. Senator Stephenson returned home recently to spend his eighty-fourth birthday anniversary, but Mr. Patrick remained in Washington with his wife. Mr. Patrick passed his seventieth birthday on June 5 last. He leaves a wife.

Isaac Lang, New York representative of the Gurney Refrigerator Company of Fond du Lac, died in New York recently. Mr. Lang had been identified with the Fond du Lac company for the past twenty years and was well known in that city. His son, Maurice Lang, who had been associated with him, will take charge of the New York branch as successor to his father.

The plant of the Bayfield Box & Lumber Company at Bayfield was

destroyed by fire with a loss of $50,000. The plant will probably be rebuilt.

A damage of $5,000 was done to the plant of the H. A. Schwartzburg Box Factory, 529 North avenue, last week. A large stock of cigar boxes was destroyed

The Hardwood Market

CHICAGO

The furniture exhibits which are opening up this week in the Chicago market are having a very material effect, as they usually do, on demand on the part of furniture manufacturers for hardwoods. It is of course true that considerable sales are effected by handlers of veneers and hardwood lumber in attendance at the exhibits, but, nevertheless, as a general thing, the disposition of buyers is to withhold orders until it has become apparent just which style they are offering will take. Another feature of the local trade is the recent strike of the cabinet makers, which, however, has not assumed serious proportions. It was anticipated some time ago by the employers, who made plans which are effectively taking care of the situation. Trade locally is unquestionably dull, this condition being the result, as it is in other large markets, both of the seasonable condition and of the general letting up of business of all kinds throughout the country. Nothing startling has yet developed regarding price quotations on hardwoods. In fact, one of the largest sawmill concerns with sales offices in the local market stated that it only last week raised prices on all stocks $1 a thousand. This company has an immense output to market and apparently is disposing of its entire product satisfactorily.

The factory trade offers the best field for sales locally as the yard concerns are not buying satisfactorily. The latter condition is due no doubt to the slump in yellow pine prices.

In conformity to the opinion expressed at most of the large markets, the Chicago trade is predicting continued dullness for the next month or two by a normal opening up in trade for the fall months.

NEW YORK

Despite the summer season and its usual dullness, the New York hardwood market is bearing up well and there is no weakening in prices. There is still some difficulty in getting stocks and good lumber is quickly taken. The condition of supplies is perhaps more responsible for the continued firm prices than anything else, for it is noted that the volume of business going is nothing above normal. The manufacturing trade is buying in fair quantities, but only for current needs and it will probably be some weeks before buying for general purposes will be noticeable. The flooring market continues strong and fairly active, and a good volume of business is looked for in this line after the warm weather. Oak, ash, maple and birch head the list in demand, poplar being in less call than the others.

BUFFALO

The hardwood trade is generally reported to be a little quiet, although it is about the average for this season. Some yards have considerable stock coming in, particularly from the South, most of the lake lumber receipts being delayed until later in the season. For the first five months of the year business was very good, but during May and June strikes in various centers began to check building operations somewhat. The labor outlook is better at present and most of the differences have been settled for the year. The tariff uncertainty is now the main thing in the way of business. Prices are holding firm.

The demand for plain oak continues relatively good, with brown ash also in fair demand. A good inquiry exists for flooring in different woods, especially oak and maple, and prices are holding firm. Other hardwoods are generally bringing a fair price, the quotations showing little change from those of a month ago.

PHILADELPHIA

Notwithstanding hot weather, the arrival of the vacation season and the semi-annual stock-taking by some of the firms, the volume of hardwood trading has been remarkably well sustained during the last fortnight. As there is considerable stuff in transit, buyers are still holding off for possible bargains, which naturally interferes somewhat with a more vigorous activity. Building work has made a leap with the coming of settled weather. The total amount of work undertaken during June shows an increase of $18,795 over May and the totality for the first six months of 1913 exceeds the same period of last year by $1,717,280. Yards which have carried a full stock in anticipation of a boom in building lumber are now in a position to handle all rush orders. Consuming industries continue fairly active and box makers, although not rushed, manage to secure enough business to keep the machinery going. Veneer and mahogany sales continue active, the season having been the best in years for these woods.

With one or two exceptions the hardwood market remains firm. Stocks do not increase and the pile would soon be cleaned up with the first rush of orders. Oak remains leader, with prices stiff and stocks scarce; ash is making new friends; high-grade chestnut is in strong demand; birch is

Dry Stock

Partial List—Ready for Shipment

COTTONWOOD

4/4" Box Boards	13"-17"	200,000'
4/4" 1sts & 2nds	6"-12"	250,000'
4/4" 1sts & 2nds	13" & up	100,000'
4/4" 1sts & 2nds	All 6"	50,000'
5/4" 1sts & 2nds	6" & up	20,000'
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Kraetzer-cured LUMBER

moving up; basswood in good request; flooring of all kinds is active; gum is moving along evenly; wide poplar a little slow; cypress made a jump and low grades of all kinds are fairly active.

PITTSBURGH

Hardwoods are showing a very good front considering the season, for it cannot be denied that the retail midsummer dullness is here. Manufacturing orders, however, are keeping up well. There is evidence that demand along this line will be very good all summer. This is due partly to the fact that recently purchasing agents have been following the hand-to-mouth policy in buying which makes it necessary to replenish stocks at very frequent intervals. Their buying for next year's requirements has not yet started. It is a little early to determine the probable status of this business, for, until the course of all business is shaped up a little more accurately than now, wholesalers are guessing. The first six months of this year have shown a very substantial gain in sales of hardwood over last year. It is evident that business in most lines is going to be good and wholesalers in general believe that in the fall there will be a strong resumption of lumber buying.

BOSTON

The hardwood lumber market has shown very little change during the past two weeks. Some dealers report considerable activity to demand, while others state that the call is not so large as they anticipated it would be at this season of the year. The high prices that are being asked by practically all manufacturers of hardwood lumber tend to keep the demand down to actual wants. Few buyers are willing to anticipate their needs, believing that the present high prices cannot be fully maintained unless the demand for lumber becomes much more active than it is at present. All reports received in this market from mill points indicate that manufacturers are for the most part very firm in their ideas for the future. During the two midsummer months demand is seldom really active, but late in August business generally improves and it is expected that this year will be no exception. Manufacturers of furniture for both home and office use are reported to be moderately busy and small chair manufacturers in New England are said to have a good volume of orders on hand. The piano trade is fairly busy. Manufacturers of interior house finish are for the most part running their plants full and have a good volume of business in sight. The strongest feature of the hardwood market in the East is plain oak. This is scarce and very firmly held at high prices. Quartered oak is also firm with a good demand for stock one inch and under. Ash has attracted a fair amount of new business. Veneers in this market have been in good demand and manufacturers are busy.

BALTIMORE

While no important modifications have taken place in the hardwood business a feeling has begun to manifest itself that prices will go lower; according to some reports a beginning has already been made. No. 1 common oak has eased off, it is asserted. Some members of the trade profess to believe that an easier feeling actually prevails, though the movement still appears to be active enough, stocks being taken up with marked freedom and the movement being large. The time has arrived when the production is also cut down in consequence of mill hands taking a vacation. Any curtailment in the demand, therefore, is likely to be offset by a curtailment in the offerings, and there is apparently no reason to become alarmed and mark down the quotations.

It is true that stagnation or even demoralization prevails in the export plank trade, but this is due to the flooding of the foreign markets. Attractive returns last winter encouraged the forwardings, and congestion has resulted. The mills will have to turn their attention to the manufacture of other kinds of lumber, in which there is no surplus. The foreign situation is complicated by reason of the fact that much short length stuff has gone forward. In times of a scarcity of stocks these short lengths are taken up with the rest, but when the offerings of planks are as liberal as is the case at the present time, rejections are certain and the accumulation of these short lengths is used to depress the whole list. Some of the exporters, interpreting the signs accurately, gave orders at an early stage of the recession to sell the short lengths for anything they might bring, and to yard the full length stocks until a fair price could be obtained, thus escaping getting in deep, even though profits were sacrificed. Other divisions of the export trade appear to be in fair shape, with the inquiries rather slower than they have been, and with the disturbances in southeastern Europe affecting the situation more or less. Low-grade poplar is in such plentiful supply on the other side that the buyers are disposed to insist upon concessions, but the rest of the list is fairly steady.

The home business continues good in point of quantity, while the returns are holding up quite well. Firms report that they are doing a larger volume of business than ever before, with basswood, gum and other stocks in active request, and with the outlook sufficiently encouraging to induce a continuance of operations at an undiminished rate.

COLUMBUS

The hardwood trade in Columbus and all parts of central Ohio has been very active during the past fortnight. While this is usually the quiet period of the year, due to the beginning of the vacation period and the

time of the mid-year inventories, the demand from both yards and factories is holding up extremely well. It is about a stand-off between retailers and manufacturers in purchasing.

All grades and varieties of hardwoods are moving fairly uniformly. There is no especial accumulation of stocks in any grade, and as a result no price-cutting is necessary to keep the trade in a healthy condition. Yard stocks are fair. Factory stocks are not very large and the policy of purchasing agents is to buy only what is wanted for immediate consumption. Factories engaged in making vehicles and implements are good buyers. Automobile factories are also in the market. Furniture factories will not buy until after the summer show period is over.

Mill stocks are only fair and this is taken as an indication that weakness in price will not come about. Only a slight influence on hardwoods is felt by the extreme weakness in yellow pine. Railroads are able to make deliveries fairly promptly and there is not much trouble as yet from a car shortage. The principal trouble appears to be in the lack of motive power on railroads. Collections are good.

Quartered and plain oak is strong and the movement is good. Prices on all grades are high. There is a good demand for chestnut at good prices. Poplar is gaining in strength and all grades are moving well. Basswood and ash are in good demand. Other hardwoods are unchanged.

CINCINNATI

Owing to the weather many factories have been running short time and this has affected the lumber trade to some extent. The outlook for business is none too promising for anything like a big year, although the chances for a normal trade are very bright. Right at this time there is a dullness that is decidedly noticeable, but there are many inquiries that are encouraging. Wholesalers are of the opinion that there will be a good general demand for small shipments as needed, with very little buying in a general way until at least the early part of September. In the meantime prices on all hardwoods are well maintained and dealers are satisfied with the large stocks that they are carrying. Just about the same optimistic feeling prevails among the millmen as is held by the wholesaler. They, too, are accumulating some stocks and all are well satisfied that with a fair demand at this time of the year a strong tendency is toward good business in the fall and all concerned are now in good shape to take care of business when it comes. The market continues dull in the upper grades of poplar, but low-grade stock is moving freely at good prices. The prospects for better business in the poplar field are not at all bright and the chances are that the market will remain spotty the balance of this year, but should show much better during the early fall.

INDIANAPOLIS

The hardwood trade has not been especially active during the last fort night. Conditions, however, have been a trifle better than they were at this time last year. Prices are still steady with no signs of a break. Shipments are moving promptly. Labor troubles, which are tying up building to some extent, and inactivity among the veneer mills is attributed largely to the cause of the slackening up of the hardwood trade. Logs are easy, with an upward tendency in prices.

MEMPHIS

The hardwood market here is perhaps a little quieter than a short time ago, but business is pretty well maintained and prices are showing no particular sign of easiness. Weather conditions have been exceptionally favorable during the past three or four months for logging operations, and these have made excellent progress. In fact, the mills are well supplied with timber and this is accepted as indicating rather fuller stocks for fall and winter requirements. There is, however, no evidence of accumulation of lumber at the moment and the market therefore presents a very steady front. Buyers are taking lumber only as they have to do so. This finds reflection in the fact that orders are for small rather than for large quantities. The aggregate of these orders, however, is quite satisfactory and there is very little disposition on the part of members of the trade to complain regarding the situation. There is always some slackness at this time of the year and it is rather less than more pronounced now than usual. Plain oak is a good seller in all grades. Firmness continues to characterize the lower grades of cottonwood and gum, although the supply is a little more adequate for both than heretofore. Red gum is being pushed by all members of the trade here who manufacture this lumber, and very satisfactory results are following the campaign of education in its behalf. There is a particularly good foreign demand for thin stock. There is no surplus ash offering here and there is a good enough demand to take care of practically all of the quartered red and white oak. Exporters are confronted with the question of securing through bills of lading after Aug. 23 and also with the renewal of annual contracts between Aug. 1 and Sept. 1. Both of these problems promise to be somewhat difficult to handle and the export trade depends largely upon the solution thereof. At the present time there is a good foreign demand for southern hardwoods and quite a satisfactory business is in progress.

NASHVILLE

The hardwood lumber trade has been quiet in the Nashville market, though of seasonable volume. While shippers and manufacturers are not inclined to make concessions, there seems to be an easier tone to the market. Oak continues in good demand, and there is a fair amount of

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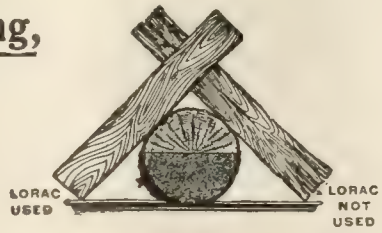
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activity in poplar, chestnut and other lines. The hardwood flooring trade has had a season of prosperity and some fine orders have been filled. Shipments have been made to the East and also to foreign countries. Satisfactory business is also reported at the box factories.

LOUISVILLE

The general agreement is that the condition of business is much better than it was this time a year ago. The demand is holding up well and, with the furniture exhibits soon to be over, the call for lumber from that quarter will likely be renewed in increased volume, as all reports have it that retailers in most sections of the country, with the possible exception of the East, are well satisfied with the present outlook. Oak lumber is moving well, quartered oak seeming to have the call. Plain oak is still in good demand, however, and prices have not suffered from the temporary lull. Poplar is pretty quiet, the demand for all grades having tapered off somewhat. Ash is a good seller, but gum is less active than it has been. Mahogany is selling well and prices are firm.

ST. LOUIS

Business is quiet at this point and the usual summer inactivity is on. The local distributors, however, are not idle. They are busy replenishing their stocks and getting ready for the fall trade. There is a diversity of opinion among them as to the volume of fall business they will do. Some state that consumers still have a good quantity of lumber on hand, resulting from deliveries being made to them on old contracts, so they will not come into the market and buy as liberally as they would do otherwise. Other distributors think that business will be excellent, basing their belief on the fact that what the consumers now have on hand will be used and they will have to come into the market to buy.

Prices remain excellent on nearly every item on the hardwood list. This is particularly true as to plain oak. This item is in good demand and is comparatively scarce. Manufacturers are getting out timber as fast as they can and have a pretty good accumulation of stocks on hand, but are not over stocked. The cypress trade has been fairly good. The larger yards have been receiving lumber for some time and are now in pretty good shape to take care of a big business.

MILWAUKEE

While the usual summer dullness is making itself felt in the Milwaukee hardwood trade, conditions are better than at this time a year ago, and the prospects for a late summer and fall trade are exceptionally good. Business in general seems to be adjusting itself satisfactorily, as the talk regarding tariff and currency reform is becoming more rational, and people at most points around the state are inclined to go ahead with their building operations. Best of all, the crop outlook is unusually bright and when this state of affairs exists in this section of the Northwest it is pretty certain that general business will be good.

The high level of prices which is being maintained in most lines of hardwood is tending to prevent consumers from buying more than enough to meet their present wants. Manufacturers seem to be confident that the future demand will be strong, and there are no evidences of price cutting. Stocks are light in practically every line, buyers finding it necessary to place fair orders. Maple, birch and low-grade basswood are still in leading demand.

LIVERPOOL

The volume of arrivals has been exceptionally heavy during the past month. At present the quays here have a very animated appearance, stocks being moved promptly away into consumption. Under the circumstances values have kept up wonderfully well and in many instances advances have been noted. Prime ash planks are the firmest spot in the market, and shippers of the right stock should have no difficulty in obtaining orders at advanced prices. The best thicknesses are 3-inch and 4-inch, but 1½-inch and 2-inch stock is also easily sold. Walnut is also exceedingly firm, but that is an old story. This wood is firm simply because the supply is not equal to the demand.

There are one or two items, however, which are far from being firm. Round hickory logs is one of them. Parcels now on the quay are selling for from £8 10d to £8 6d. The stock now on the quay is rapidly disappearing into consumption and will not hold over until new wood arrives. It is stated that shippers have been exceedingly foolish in handling their shipments to this port during this season. They have dumped stocks in the most impossible fashion, without any regard to the market requirements. Just when the market was at its firmest point they flooded the market with four or five thousand logs. This port can swallow about as much hickory as any other port in the world, but it doesn't like it all coming at once, and the recent attitude has really been too absurd for words. The same folly seems now to be in full operation in the extensive wagon oak plank market, and it is to be hoped that the present tendency to ship on consignment will not be continued. This market can stand shipments on consignment only in the days of bare markets, and shippers should take the advice of responsible brokers before adopting such suicidal tactics as they have recently adopted with wagon oak and hickory.

The mahogany position was much strengthened by the sales held recently. The stocks offered were not extensive and prices advanced slightly in the face of a keen demand. There seems no immediate prospect of prices being reduced in the near future.

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A double band mill in the Upper Peninsula of Michigan which has not been running for several years will be started this summer, cutting hardwood. Only part of mill and woods crew engaged. Permanent work all the year for the right men. State age, experience and wages. Address "BOX 60," care HARDWOOD RECORD.

EMPLOYMENT WANTED

NOW OPEN FOR GOOD POSITION

A strictly sober, ambitious, honest, energetic man with 22 years' experience as hardwood lumber buyer, inspector, dry kiln operator, and general yard. supt., can come at once and furnish best of references. Advancement appreciated. Address, "BOX 65," care HARDWOOD RECORD.

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs. 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

GEO W HARTZELL. Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
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LUMBER FOR SALE

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list showing the annual requirements in lumber dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg., Chicago.

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TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references

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I own in fee simple two small and carefully selected tracts of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

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"BOX 69," care HARDWOOD RECORD.

FOR SALE

4,240 acres coal and timberland, 9,000,000 ft. oak, hickory, poplar and other timber; one-third of area underlaid with the Seewanee coal vein. four-fifths with two or more other veins. Price $15 per acre. H. C. SHUR, Duluth, Minn.

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hardwood, in fee simple, cutting twenty million feet. Traversed by a railroad. Price and terms attractive. LUTHER ROBERTS,
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FOR SALE CHEAP—SIXTY ACRES

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LUMBER WANTED

WANTED—20 CARS

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Shipper to invoice direct. Name prices on any stock you desire to move.

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WANTED

DIMENSION OAK

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Send to us for specifications and prices.

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HOISTS AND DERRICK IRONS.

for handling logs at mill.
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MACHINERY WANTED

WANTED

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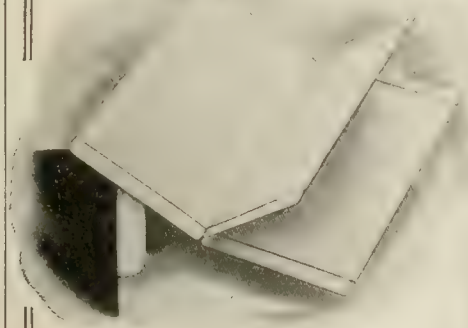
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Patent applied for on covers. Copyrighted, 1910. Triplicate Tally Tickets patented.



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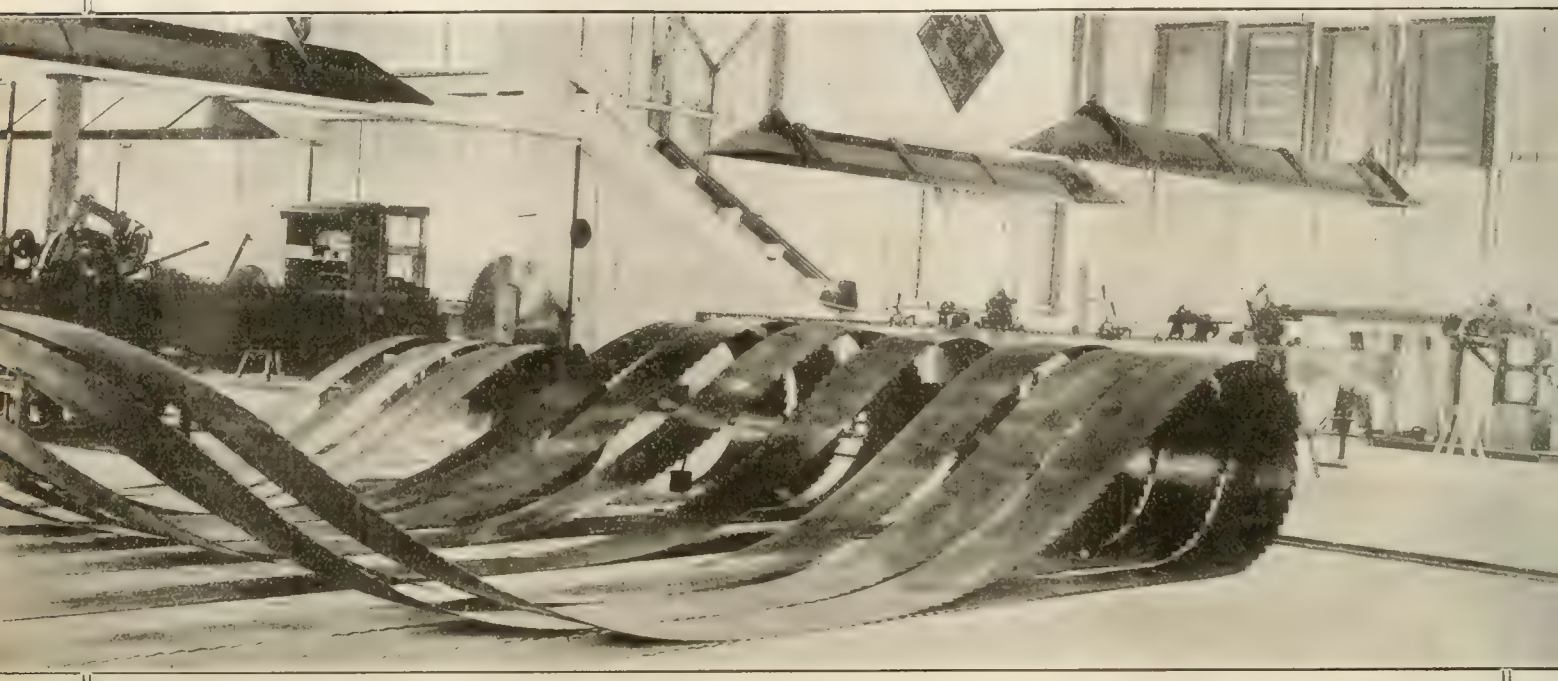
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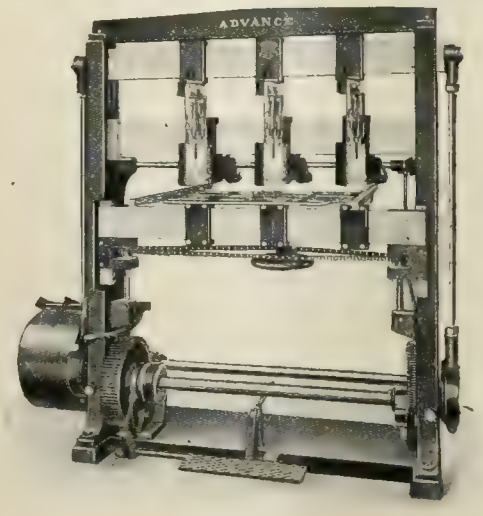
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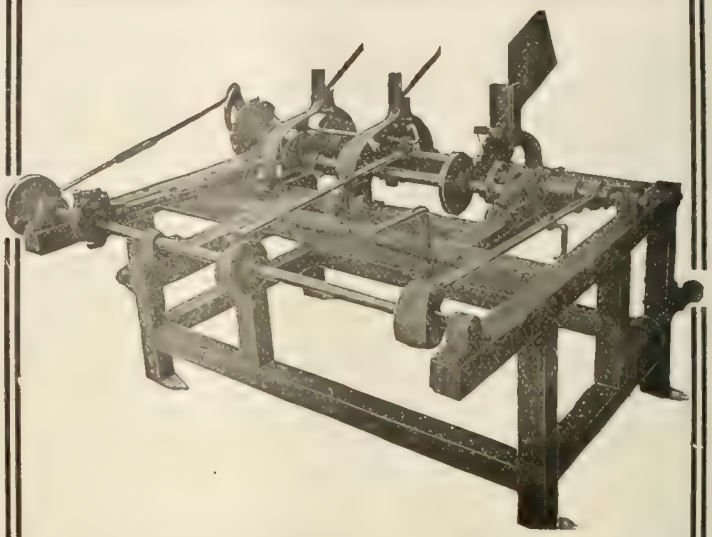
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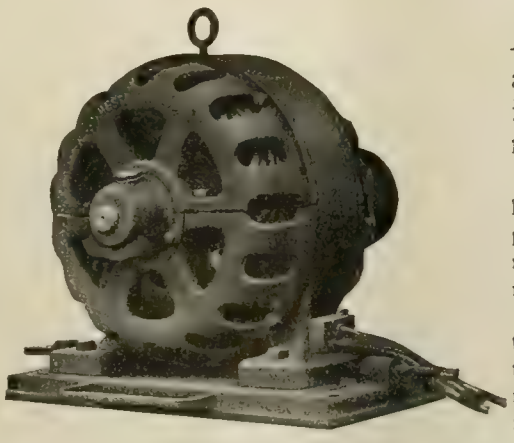
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Ready for Shipment

MAPLE

2″ No. 1 Common & Better

BIRCH

1″ No. 1 Common & Better

1¼″ No. 1 Common & Better

1½″ No. 1 Common & Better

BASSWOOD

1″ No. 1 Common

1¼″ No. 1 Common

Brown Bros. Lumber Co.

Rhinelander, Wis.

WE MANUFACTURE MICHIGAN HARDWOODS AND HEMLOCK. MILLS ELECTRICALLY DRIVEN; STOCK BAND SAWN

Have in Shipping Condition

4/4, 5/4, 6/4 and 8/4 BIRCH

also a good stock of Hemlock Dimension & Tamarack Bridge Plank

WILL BE PLEASED TO QUOTE PRICES ON APPLICATION

THE C. A. GOODYEAR LUMBER COMPANY

Office and Mill at TOMAH, WISCONSIN

Logging Camp BLUE BILL, MICHIGAN

Birch Is Our Specialty

All Grades, All Thicknesses

Basswood
Maple
Elm

Oelhafen Lbr. Co.
Tomahawk
Wis.

CIRCASSIAN

THE REMARKABLY INCREASED POPULARITY OF CIRCASSIAN IN THE UNITED STATES IS SEEN EACH YEAR IN GOVERNMENT REPORTS.

ARE YOU IN A POSITION TO GET YOUR SHARE OF THAT BUSINESS?

BUY WHERE YOU CAN HAVE PICK OF LARGE ASSORTMENT OF HIGH-GRADE WOOD—WHICH WE ARE FEATURING.

Adams & Raymond Veneer Company

Indianapolis

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

Boice Lumber Co., Inc.

Southern Hardwoods

MAIN OFFICE
RICHMOND, VIRGINIA

Yards: NORFOLK, ABINGDON, GRAHAM, VA., and NORTH WILKESBORO, N. C.

Our Corps of Inspectors

Intelligent! Highly Trained! Conscientious!

Is assurance that you will get what your order calls for when you buy Gum from us.

Himmelberger-Harrison Lumber Company

Cape Girardeau, Missouri

Baker-Matthews Manufacturing Co.

Sikeston, Mo.

Band Sawn Southern Hardwoods

SPECIALTIES
RED GUM, PLAIN OAK
SEND US YOUR INQUIRIES

GARETSON-GREASON LUMBER CO.

1002-1005 Times Bldg. ST. LOUIS

MANUFACTURERS

Three Mills

Frank Purcell Kansas City U. S. A.

Exporter of Black Walnut Logs

JO MARK

FIGURED WALNUT IN LONG WOOD AND STUMPS

Salt Lick Lumber Co.

SALT LICK . . . . KENTUCKY

MANUFACTURERS OF

Eureka OAK AND BEECH **Oak Flooring**

Complete stock of 3/8" and 13/16" in all standard widths

Carolina Spruce Co.

MANUFACTURERS

Spruce & Hardwood **LUMBER**

Mills: Pensacola, N. C. *Capacity* 90,000 ft. per day

Charles K. Parry & Co. Sole Selling Agts. Land Title Bldg. Philadelphia

Louisiana Long Leaf Lumber Co.

Fisher, Louisiana

Diamond 4 L Co. Brand

OAK FLOORING

A GUARANTEE OF PERFECTION

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - WELLS, MICHIGAN

For the Better Kind of Hardwoods

write

EAST JORDAN LUMBER CO.

East Jordan, Mich.

ALL THE MICHIGAN HARDWOODS

Makers of

LATH SHINGLES — **Imperial Brand** MAPLE FLOORING — PINE AND HEMLOCK

FORMAN'S FAMOUS OAK FLOORING

Is made in faultless fashion from the most uniform-colored and even-textured oak produced; worked from Kraetzer-Cured lumber manufactured at our Heidelberg, Ky., sawmills.

Thomas Forman Company

Detroit : : : : : Michigan

Von Platen Lumber Co.

Iron Mountain, Michigan

MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

100 M Ft. 4/4 No. 1 and 2 Common Birch.
50 M Ft. 5/4 No. 1 Common Birch.
50 M Ft. 5/4 No. 2 Common Birch.
100 M Ft. 5/4 No. 1 and 2 Common Maple.
100 M Ft. 6/4 No. 1 and 2 Common Maple.

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

"Chief Brand" Maple and Beech Flooring

in 3/8, 1/2 and 13-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

For Prompt Shipment

Basswood—100,000 ft. 5 4 No. 2 Common & Better.
Soft Maple—25,000 ft. 4 4 & 8/4 Log Run M. C. O.
White & Red Oak—12,000 ft. Log Run M. C. O.
Black Walnut—3,000 ft. Log Run M. C. O.

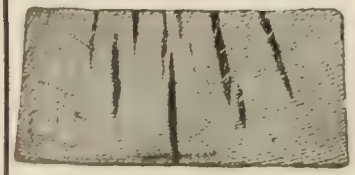
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S. L. EASTMAN FLOORING CO.

SAGINAW BRAND

MAPLE FLOORING

SAGINAW, MICH.

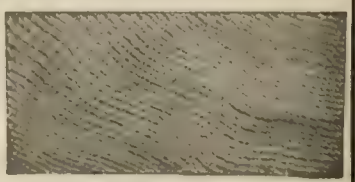


Lumber Dried As Never Before

SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN

GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN



BUFFALO

The Foremost Hardwood Market of the East

ANTHONY MILLER
HARDWOODS OF ALL KINDS
893 EAGLE STREET

G. ELIAS & BRO.
HARDWOODS
White Pine, Yellow Pine, Spruce, Hemlock, Fir, Lumber, Timber, Millwork, Boxes, Maple and Oak Flooring
955-1015 ELK STREET

I. N. Stewart & Bro.
Specialties
Cherry and Oak
892 Elk Street

Standard Hardwood Lumber Co.
OAK, ASH and CHESTNUT
1075 Clinton Street

BUFFALO HARDWOOD LUMBER CO.
We want to buy for cash
OAK, ASH AND OTHER HARDWOODS
All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.
940 Seneca Street, BUFFALO

Hugh McLean Lumber Co.
OUR SPECIALTY:
QUARTERED WHITE OAK
940 ELK STREET

T. SULLIVAN & CO.
SPECIALTIES:
Gray Elm, Brown Ash
Pacific Coast Fir and Spruce
2 ARTHUR STREET

ORSON E. YEAGER
SPECIALTIES:
Oak, Ash and Poplar
932 ELK STREET

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant, Kitchen & Company

Manufacturers Old-Fashioned Soft Yellow Poplar

5-8 and 4-4 in Wide Stock, Specialty

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. C
601 W. 115th Street, New York City

OUR specialty in Poplar, 4- ..d Maple is cutting to order special thicknesses and widths. Our facilities an .. quality of our timber enable us to do this to your entire satisfaction. .. specialties we can make to your advantage,— High grade Car Sign Boards ir ..lar we give special attention to,—

4/4 16″ and wider, high grac Maple No. 1 Common & Better usually in stock,— Three cars ready for shipment now,—And also always have on hand a nice stock of Hemlock Boards in all grades,—

WE SOLICIT THE BUSINESS OF DISCRIMINATING BUYERS FOR ALL HIGH GRADE SMOKY MOUNTAIN HARDWOODS AND HEMLOCK

LITTLE RIVER LUMBER COMPANY **Townsend, Tenn.**

W. H. White Company
Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.
Sales Office: BUFFALO, N. Y.

STOCK DRY — STANDARD GRADES — BEST MANUFACTURE — CAR OR CARGO SHIPMENTS

WE OFFER
All Kinds
OF
Hardwood and Hemlock
Lumber
Hardwood
Flooring, Lath
AND
Dimension Stock

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED
POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD

NATIONAL HARDWOOD MANUFACTURERS ASSOCIATION OF THE U.S. — A Guarantee of a Square Deal in both Grade and Measurement

SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Hardwood Record

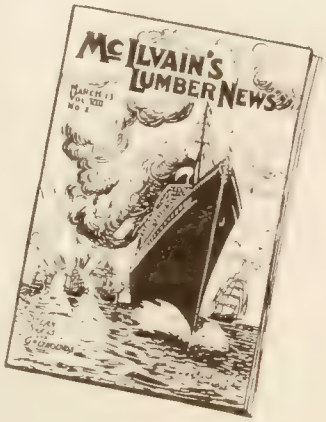
Eighteenth Year, Semi-Monthly.

CHICAGO, JULY 25, 1913

Subscription $2. Single Copies, 10 Cents.



ADVERTISERS' CLASSIFIED DIRECTORY FOLLOWS READING MATTER.



¶ When we say every month that we are always glad to be tested on rush orders, we mean just this, exactly.

¶ Never hesitate to call on us when you want the goods in a hurry.

¶ Prompt delivery is the "McIlvain Way."

Look over this month's "Lumber News"—If it is not on your desk, drop us a postal—it will be sent by return mail.

J. GIBSON McILVAIN & CO.

1420 Chestnut Street Philadelphia, Pa.

WE MANUFACTURE

HIGH-GRADE HARDWOODS

You can Secure Immediate Shipment on

4/4 Sap Gum in 1st & 2nd and Com.
4/4 Sap Gum Boxboards, 13"-17", in 1st & 2nd.
5/4 Sap Gum in 1st & 2nd and Com.
3/4 Sap Gum in 1st and 2nd.
4/4 Red Gum in 1st & 2nd and Com.
4/4 Mottled Gum in 1st & 2nd and Com.
5/4 Quartered Red Gum in 1st & 2nd and Com.
4/4 Quartered Red Gum in 1st & 2nd and Com.
5/4 Plain Red Oak, 10" & up, in 1st & 2nd.
4/4 Plain Red Oak in 1st & 2nd and Com.
3/4 Plain Red Oak in 1st & 2nd and Com.
4/4 Plain White Oak in 1st & 2nd and Com.

We Produce

Plain and quartered Red and White Oak, plain and quartered Red Gum, Cypress, Cottonwood, Ash, Elm and Poplar.

MEMPHIS BAND MILL COMPANY

MEMPHIS, TENN.

Otis A. Felger, [illegible] George McSweyn, Vice-Pres.
J. L. McSweyn, Pres. and Gen. Mgr.

Cartier-Holland Lumber Company

DON'T OVERLOOK THIS BET!

We wish to call your attention to the following high grade lumber. Same is in nice shipping condition, and especially adapted for high grade furniture or interior finish work.

30,000′ 4 4 End Dried Winter Cut White Maple
40,000′ 4 4 High Grade No. 1 Common and Eetter Birch
40,000′ 5 4 High Grade No. 1 Common and Better Birch
100,000′ 4 4 1sts and 2nds Soft Elm
150,000′ 1x4″ Pine Crating Strips S2S
50,000′ 1x4 & Wdr. Pine Crating (85% 6″ & Wider)

WE WOULD APPRECIATE YOUR INQUIRIES

Ludington Michigan

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

BASSWOOD

We Offer for Prompt Shipment

1x4 Clear Strips	150 M.
1x6 Clear Strips	200 M.
1x7 & 8-inch 1s & 2s	25 M.
1x3 No. 1 Common	48 M.
1x5 No. 1 Common	35 M.
1x6 No. 1 Common	162 M.
1x7 & up No. 1 Common	18 M.
4/4 No. 1 Common	34 M.

July 21, 1913

COBBS & MITCHELL, Inc.

Sales Department

CADILLAC MICH.

Mitchell Brothers Co.

Dry Stock List

MICHIGAN HARDWOODS

Cadillac, Mich. July 21, 1913

1x7 & 8 Basswood, 1s & 2s	28 M
1x4 Basswood, No. 1 Common	11 M.
1x7 & up Basswood, No. 1 Common	18 M.
4/4 Cadillac Gray Elm, 1s & 2s	94 M
4/4 Cadillac Gray Elm, No. 1 Common	76 M
4/4 Cadillac Gray Elm, No. 2 Common	66 M
4/4 Cadillac Gray Elm, No. 3 Common	30 M
4/4 Rock Elm, No. 2 Common & Better	7 M.
4/4 Soft Maple, No. 2 Common & Better	20 M.
4/4 White Maple, End Dried (Clear)	14 M.
4/4 Birdseye Maple, 1s & 2s, End Dried	1½ M.
4/4 White Pine, No. 3 Common	20 M

CADILLAC QUALITY

When you want lumber of Cadillac Quality, Lumber which has been manufactured and seasoned properly, and grades which have not been blended to meet price competition—send us your inquiries.

WE SELL ONLY MITCHELL'S MAKE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

100,000 ft. 5/4 1st & 2nds Basswood

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



Ready for Shipment

Ten cars
4/4 No. 1 Common & Better Birch

Five cars
6/4 No. 1 Common & Better Birch

Two cars
8/4 No. 1 Common & Better Birch

Two cars
4/4 No. 2 Common & Better Ash

Five cars
4/4 No. 2 Common S. Elm

Five cars
4/4 No. 2 Com. & Better Basswood

Above cut from virgin timber. Grade and manufacture are first class.

Mears - Slayton Lumber Co.
1237 Belmont Ave. Chicago, Ill.

15,000,000 Feet Always On Hand



Our Double Band Mill
Huttig, Ark.

With two mills like this we manufacture 40,000,000 feet of band sawn southern hardwoods annually. We guarantee our lumber to be of excellent widths, full thickness, and to contain 50% to 75% of 14′ and 16′ lengths. We make high grades and all of the "CREAM" is in each grade. Send us your inquiries.

"Wislumbco Standards"

50,000 ft. 4/4 1st & 2nd Red Gum
40,000 " 4/4 No. 1 Common Red Gum
75,000 " 4/4 x 13 to 17" Box Board Tupelo
30,000 " 4/4 x 13" & Wider 1st & 2nd Tupelo
65,000 " 4/4 x 6 to 12" 1st & 2nd Tupelo
50,000 " 4/4 x 13 to 17" Box Board Sap Gum
50,000 " 4/4 x 13" & Wider 1st & 2nd Sap Gum
75,000 " 4/4 x 6 to 12" 1st & 2nd Sap Gum
75,000 " 4/4 No. 1 Common Sap Gum
60,000 " 4/4 No. 2 Common Sap Gum
50,000 " 6/4 Log Run Soft Maple
75,000 " 4/4 Shop Cypress
60,000 " 4/4 No. 1 Common Cypress
25,000 " 8/4 Log Run Hickory
100,000 Pcs. 1¼x1¼ 19" Oak Squares

A good stock of Oak, Gum, Cypress, Cottonwood, Elm and Maple

Wisconsin Lumber Co.
CHICAGO

MILLS
Huttig, Ark.
Deering, Mo.

SAVE YOUR MONEY BY USING THE

RED BOOK Published Semi-annually in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the **United States, Alberta, Manitoba and Saskatchewan.** The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. **Write for terms.**

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St. CHICAGO — Mention This Paper. — 116 Nassau Street NEW YORK CITY

WANTED — Moulding or Water Stained Poplar, inch thick; stain and pin wormholes not considered defects, but must be practically free of knots.

HAYDEN & WESTCOTT LUMBER COMPANY
823 Railway Exchange Chicago, Illinois

¶ For items of Hardwood Stock or Hardwood Machinery, you will find it advantageous to write our advertisers. Get in touch!

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

Estabrook-Skeele Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash

And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, - - - CHICAGO

'PHONE HARRISON 1984

J. RAYNER

VENEERED PANELS

ALL WOODS

SEND FOR STOCK LIST

MAHOGANY LUMBER

CARROLL AVE. AND SHELDON ST.

CHICAGO

ELEPHANT RUBBER BELTING

AIR DRILL AND AIR TOOL

HOSE

STEAM
WATER
SUCTION

EXTRA QUALITY



Recommended for hard service and guaranteed to do the work

SELLING AGENTS

CRANE COMPANY - - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

THE MECHANICAL RUBBER COMPANY

(Chicago Rubber Works)

307 W. Randolph Street, CHICAGO

ESTABLISHED 1882

Going up—Hardwood Timber

We have the following hardwood and pine timber for sale at prices that have not as yet been advanced with the rise in value on timber lands. For a short time we offer—

150,000,000 FEET HARDWOOD IN SOUTHEAST ARKANSAS — A SPLENDID OPPORTUNITY.

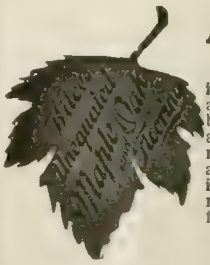
7,600,000 FEET OF HARDWOOD IN SOUTHWEST ARKANSAS

We also have timber in British Columbia and on the Pacific Coast and Oregon.

For further particulars, address

John C. Spry

Room 1003 Harris Trust Bldg., Chicago, Illinois



A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

IF YOU HAVEN'T SEEN THE GIBSON TALLY BOOK

Let us send you one on approval, with samples of Tally Tickets for triplicate, duplicate or single tallies—a score of forms to choose from. They are the latest and best. Endorsed by hundreds of lumber manufacturers and buyers.

HARDWOOD RECORD CHICAGO

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO.

KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK

OUR SPECIALTY

MANUFACTURERS OF

QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER

BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

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J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS

HARDWOODS AND PINE

POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:
Bank and McLean Ave., Cincinnati — I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:

WHITE OAK—Plain or Quartered.
RED OAK—Plain or Quartered.
CHESTNUT — BASSWOOD
POPLAR — WHITE PINE

Always carry large well assorted stock of all kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR, OAK, CHESTNUT, WHITE AND YELLOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

Kimball & Kopcke

Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

"THE VERY BEST"

ASH, BUCKEYE,
RED BIRCH, CHESTNUT, GUM,
RED OAK, WHITE OAK, PINE,
POPLAR and WALNUT

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

CINCINNATI
THE GATEWAY OF THE SOUTH

The Maley, Thompson & Moffett Co.

Veneers, Mahogany and Hardwood Lumber

Largest Stocks Best Selections

CINCINNATI, OHIO

L. W. RADINA & CO.

DEALERS IN

POPLAR AND HARDWOODS

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The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Grade West Virginia and Southern Hardwoods in stock at all times.

Shipments made direct from our own yards and mills in straight or mixed cars.

SEND US YOUR INQUIRIES

Lest You Forget
and
You probably don't know that we are now
Manufacturing in White and Red Plain and Quarter-Sawed **OAK**
3/8, 1/2, 5/8, 3/4, 4/4, 5/4 — 100,000 Feet per Day
EXPORT AND DOMESTIC

BENNETT & WITTE
MEMPHIS, TENN.
NEW ORLEANS, LA. CINCINNATI, O.
CABLE ADDRESS, ALL OFFICES, "BENNETT"

Eventually—Why Not Now?

Eventually you will buy a carload of our Plain Oak and Quartered Oak or our Poplar—WHY NOT BUY IT NOW?

If our salesman does not call on you, send us a list of your requirements, and LET US quote you.

The Mowbray & Robinson Co., Cincinnati Ohio

Manufacturers **Plain and Quartered Oak and Poplar Band Sawed Stock**

Mills QUICKSAND, KY. WEST IRVINE, KY. SOFT EASTERN KENTUCKY OAK

If you want to reach the wholesale consumers of hardwood lumber throughout the United States, a HARDWOOD RECORD advertisement will do it for you.

If you want to reach the hardwood manufacturers of the United States, a HARDWOOD RECORD advertisement will do it for you.

The HARDWOOD RECORD represents high-class, special, class circulation, with a minimum of waste circulation.

Ask any HARDWOOD RECORD advertiser for experience on results.

GOOD GRADES "STEARNS QUALITY" PROMPT SERVICE

LUDINGTON HARDWOOD SPECIALISTS

A special feature of the

Stearns Service

IS OUR MODERN AND FULLY EQUIPPED PLANING MILL.

We specialize in

Dimension
Crating
Flooring
and
General Millwork



PLANING MILL AND LOADING DOCK

A Few Bargain Items

60 M 5/4 No. 1 Com. Basswood
45 M 5/4 No. 2 Com. Basswood
65 M 4/4 FAS Beech
50 M 4/4 No. 1 Com. 6" & Wdr. Beech
80 M 4 4 No. 2 Com. 5" & Wdr. Beech
35 M 4/4 FAS Birch
40 M 4/4 No. 1 Com. 6" & Wdr. Birch
25 M 4/4 No. 2 Com. 6" & Wdr. Birch
55 M 4/4 FAS Soft Elm
40 M 4/4 No. 1 Com. 6" & Wdr. Soft Elm
20 M 4/4 No. 2 Com. 6" & Wdr. Soft Elm
80 M 4/4 No. 1 Com. 7" & Wdr. Hard Maple
95 M 4/4 No. 2 Com. 7" & Wdr. Hard Maple

The STEARNS SALT & LUMBER CO. LUDINGTON, MICH.

LAMB-FISH LUMBER CO.

MEMBER HARDWOOD MANUFACTURERS ASSOCIATION OF THE U.S. — A Guarantee of a Square Deal in both Grade and Measurement

Band Mill and General Offices

CHARLESTON, MISS.

THE LARGEST HARDWOOD MILL IN THE WORLD—ANNUAL CAPACITY 40,000,000

We Produce

Kraetzer-cured LUMBER

STOCK LIST—Dry Lumber on Hand July 1st, 1913

	3 8	1 2	5 8	3 4	1 1	5 4	6 4	8 4	12 4	16 4
FAS Qrtd. White Oak		25,000					6,000			
FAS Qrtd. White Oak 10" & up					12,000					
No. 1 Com. Qrtd. White Oak				30,000	150,000					
No. 2 Com. Qrtd. White Oak					24,000					
FAS Plain White Oak					150,000		11,000			2,000
No. 1 Com. Plain White Oak			25,000	20,000	200,000	12,000	20,000			
FAS Plain White Oak 10" & up				4,000						
FAS Plain Red Oak					100,000			6,000		1,000
No. 1 Com. Plain Red Oak			20,000	15,000	130,000					
Com. & Btr. Qrtd. Red Gum					25,000					
FAS Plain Red Gum	500,000	400,000	40,000	400,000	600,000	100,000	75,000	60,000	3,000	
No. 1 Com. Plain Red Gum	30,000	20,000	20,000	75,000	300,000	60,000				
FAS Sap Gum 13"-16"					60,000					
FAS Sap Gum 18" & up					15,000					
FAS Sap Gum 6" & up	30,000	25,000	22,000	50,000	15,000					
No. 1 Com. Sap Gum 4" & up	30,000	20,000	20,000		250,000					
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2 Cars 5/8" 1st & 2nds Red Gum
1 Car 3/4" 1st & 2nds Red Gum
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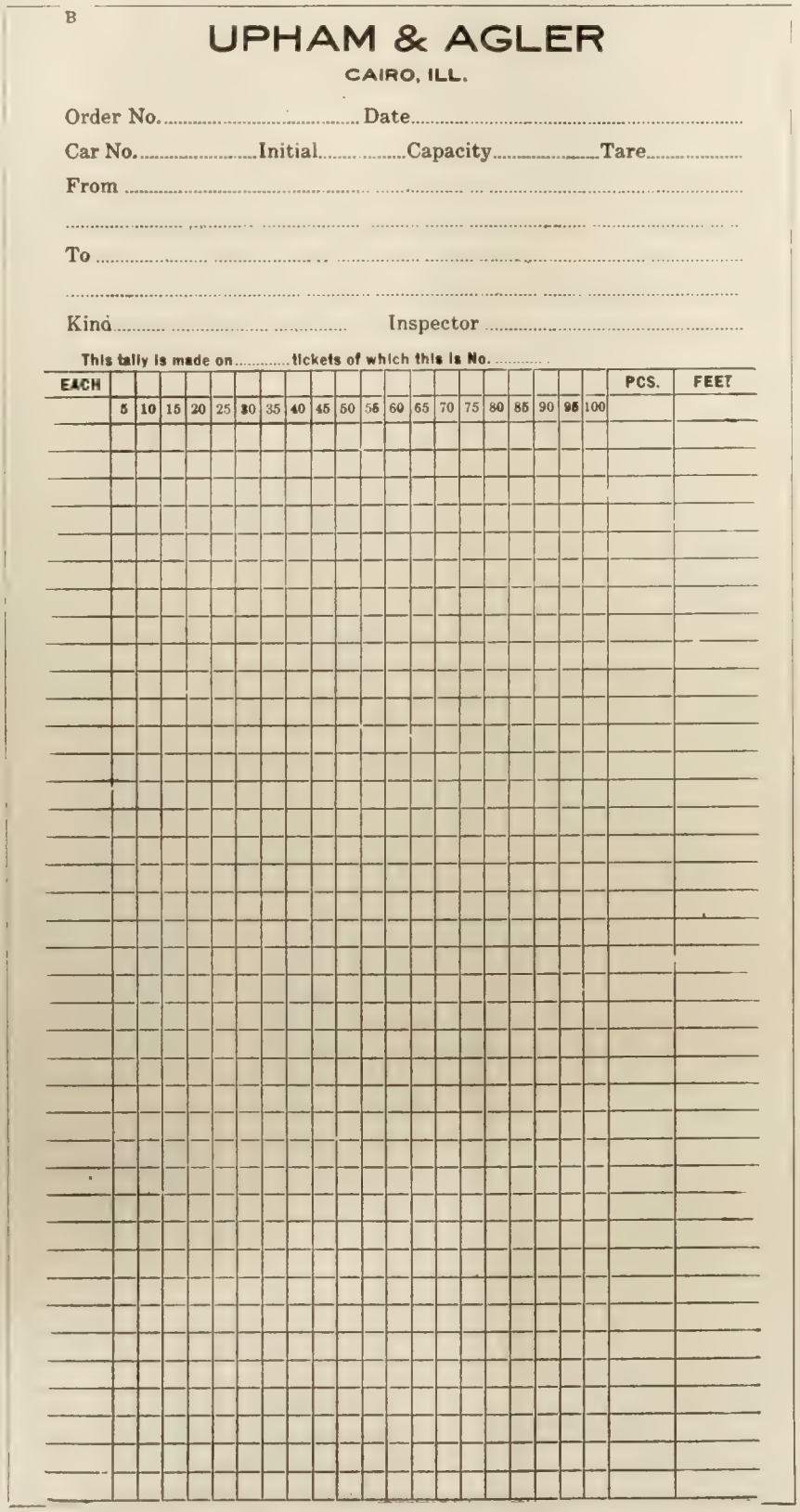
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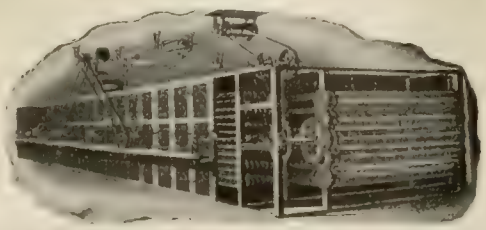
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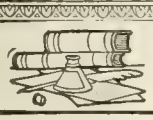
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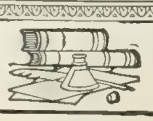
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Review and Outlook



General Market Conditions

IT IS DIFFICULT TO SEE ANY CHANGE of consequence in the general market conditions as pertaining to the hardwood lumber business throughout the country. Reports on the situation embody a remarkable combination of optimism and pessimism, but it is safe to say that most of the pessimistic expressions come from those who are too prone to consider only immediate conditions, and will not take into consideration the unusually sound fundamental conditions that it is absolutely certain prevail all over the country.

For instance, while the government crop reports are at least not discouraging, another source of information on the same subject, which can be relied upon to be absolutely authentic, gives every assurance that the general crop of the country this year will be the largest on record. Observations of those men who have analyzed the crop situation in different sections surely indicate a most excellent condition, and their opinions are backed up in every way and the situation seems even more emphatically favorable, judging from the statements emanating from the source referred to. A certain manufacturing company of tremendous proportions, which markets its product to every farming section in the United States, makes the unqualified statement that its business this year will be the largest that it has experienced for six or seven years past.

It does not take a financial giant to know why favorable crop conditions are always considered as the most favorable indications as to the general business prosperity which we have, and judging from the opinions noted above we could not even hope for more favorable conditions in the farming sections.

In addition to this the iron producing sections in the North are reported as being in most excellent shape, and this combination should surely serve as a counterbalance against any artificial depression resulting from possible efforts of the financial and speculative element of the country to play business for its own profit.

As a matter of fact, the only element that seems to be holding back trade is the lack of money. This question has been talked about a great deal, sometimes wisely and sometimes merely at random, but it is an actual fact that the present stringency in the money market is certainly contributing vastly more than its share to the laxity of general business.

For this very reason business as a whole should not take the present situation too seriously as the money shortage is a factor which is mechanical in itself, and it is easily within the power of man to remedy. Its bearing on the lumber business is felt in different ways, it probably having a very strong influence on the demand for hardwoods for factory work, and the demand for building lumber for home building.

As to the latter effect, it is reported in the East that banks are declining loans for building purposes, which in itself offers a satisfactory explanation of the laxity of demand for building woods. As to the factory demand for hardwood, the basis of the present situation is readily seen from the fact that collections are reported as being unusually slow. This points to only one condition and that is that the factory trade generally is pretty short of ready funds. Naturally not being over-burdened with cash, these concerns are unwilling to sink any more than is absolutely necessary in large purchases of material for which they have no immediate use—that is they are buying for immediate consumption only, figuring that they are not losing anything by holding off in the hope that there may be a break in prices, while if they buy in large quantities in the present market, which does not offer any particular indication of going higher, they are not pursuing good business policy.

As to the actual conditions at the mills, the southern manufacturers are beginning to admit that stocks are not moving as readily as they would like to have them, and in some cases they are accumulating. This is probably more true of the lower Mississippi hardwood region than of any other hardwood section of the country, and some slight recessions in value are noted on woods coming from that territory, although these recessions have not assumed any alarming proportions.

From the North the general tone of the report is altogether optimistic, stocks continuing to be exremely low, and it is stated on authority that with a healthy condition of trade the shortage of northern hardwoods during the next few months will be the greatest ever experienced. Even under present conditions it is anticipated that there will be absolutely no accumulation of any kind or grade of northern stocks.

With the exception of shipments to England, the export trade is reported as not being in very good shape, which, in view of the fact that the peculiar business situation is apparent all over Europe as well as in this country, and in view of the further fact that the political situation in the various countries of Europe is at a rather acute stage, is not surprising.

The immediate cause of the present export conditions probably is the fact that with the comparatively satisfactory prices prevailing during the winter, a great many concerns got into the export game and shipped large quantities of export stock, with the result that foreign markets are overloaded and exporters are

now feeling the effect of resulting laxity of demand and easing off of prices.

It may be that the present world-wide situation is but a sign of the times—an indication that the consumers of all kinds of products throughout the civilized nations of the world are putting the curb on the runaway extravagance in which they have been indulging, and which has been exploited so extensively in the press of all countries. The high cost of living has been talked about so widely and the theories on this subject have been hammered into the populations of various countries so persistently, that it is possible they are beginning to take heed and entering upon a period of world-wide economy. If this is true it would possibly have the immediate effect of checking trade in general, but the ultimate effect could not help but be extremely favorable as it would mean the accumulation of a tremendous amount of money for legitimate investment, the result of which would be the placing of the world's business in a healthier state than it has enjoyed for quite a number of years.

As far as the lumber business is concerned, however, this is not the time to exhaust one's energy in worry over the situation or in endeavoring to puzzle out a legitimate explanation of the present rather perplexing conditions. On the contrary, it is rather a time to stick to the guns pretty closely, making the best of present conditions and stand pat until present indications of an entirely healthy state of trade in the fall prove themselves to be correct.

Pessimism Not Entirely Warranted

IF THOSE PESSIMISTS whose minds have become so befuddled by the present unsettled condition of trade throughout the country, and in fact throughout the world, would take the trouble to look beyond their own immediate surroundings they could find considerable reason for optimism in the various reports and statistics on industries and business. One of these reports of peculiar significance is that recently published by the Interior Revenue Bureau on the assessments made under the corporation tax law. It covers the calendar year of 1912.

The report shows that corporations of the United States earned during that year $3,304,000,000 above all expenses. This went to millions of stockholders as dividends. The report also states that the increased prosperity of the corporation is expected to earn the federal government more than $36,000,000, including $3,000,000 of omitted taxes for the previous year. This is more than the corporation tax ever amounted to, exceeding the year 1911 by $7,000,000.

Further the total number of corporations reporting during 1912 was 310,000, an increase of 7 per cent over 1911, as compared to an increase of 6 per cent for the preceding year, and less than 4 per cent the year before that, specifically, 1909 and 1910. In every state the corporations showed an increase in assets and in properties and in dividends paid with the three exceptions of Colorado, Oregon and Wisconsin, where a merely nominal decrease was noted.

Taking these figures, which are absolutely bona fide, in connection with the promise of tremendous crops in every line in the country, including the southern cotton and cane production, and also considering the fact that the administration at Washington has demonstrated pretty closely that it has its wits well about it, we are more convinced than ever that the present peculiar condition is one entirely artificial in its nature, and not based on any fundamental weakness in the industrial or business structure of the country.

There is a little quotation somewhere from somebody which states that if everybody would smile just a little, the smile would soon reach great aggregate proportions, and in fact the result would be that the universe would soon be in a pretty fair state of mind. This is the state of affairs at present, except that instead of "smiling a while," everybody is "scowling a while," and if everybody scowls together, the aggregate scowl will be one of tremendous proportions.

It is just about full moon time now, and why wouldn't it be a good idea for the population of "terra firma" to absorb a little of the tremendous brilliancy of the moon and reflect back to it a bright, happy countenance rather than a perpetual frown of worry over something that nobody seems to be able to fathom, and which the best of them say is but a condition resulting from that very worry. It is a sort of an endless circle, or a case of being afraid of one's own shadow. Undue optimism is unquestionably just as poor a business plan as is undue pessimism, but why not get out of the rut of thinking about the things we don't know anything about anyway, and can't find out about, and let our minds dwell on the concrete facts such as are above stated, and try to work up a little enthusiasm over the situation in general.

Northern Stocks in Good Shape

REPORTS FROM THE MICHIGAN HARDWOOD MANUFACTURERS' ASSOCIATION and the Northern Hemlock and Hardwood Manufacturers' Association are analagous, insofar as they reveal stock conditions that in some quarters will probably be rather surprising. The records of the two associations prove beyond doubt that there is absolutely no accumulation of any northern stocks in hardwood or hemlock and that on the other hand some items are sold right up to cut. In Michigan the stock of hardwoods at the mill is less than it has been since 1909 and only about eighty-eight per cent of what it was a year ago. At no time during the past four years has there been a surplus stock in the hands of Michigan producers. It is expected in Michigan that under favorable trade conditions during the next year the greatest shortage of northern hardwood lumber that has ever been seen will become a fact and even under very unfavorable trade conditions it is not expected that any material surplus will develop. The total stock of maple lumber is but eighty-nine per cent of the stock of a year ago and the stock remaining unsold is less than twenty-five per cent of what it was July 1, 1912.

In Wisconsin and upper Michigan the average of seventy monthly reports during the last twelve months showed twenty per cent more hemlock shipped than sawed and forty per cent more hardwoods shipped than produced, making an excess of shipments over cut of fifteen per cent since the first of July, 1912. For the first six months of 1913 compared with the first six months of 1912 there was a decrease in hemlock cut of five per cent and in hemlock shipments of seventeen per cent and an increase in hardwood cut of twelve per cent and a decrease of hardwood shipments of seven per cent. This makes an increase of total cut of three per cent and a decrease of total shipments of thirteen per cent, the latter being affected, however, mainly by the fact that this year was begun with thirty-five per cent less stock on hand than last year.

More detailed statistics covering the cut and shipments and present conditions of stock of the members of these two associations, which make up the bulk of northern hemlock and hardwood manufacturers, will be found on other pages of this issue of HARDWOOD RECORD. They are well worthy of careful consideration. They merely go to show that the present dullness of trade as far as lumber is concerned is merely a combination of usual summer dullness and hysteria.

Terms of Sale Part of the Contract

AT ITS LAST ANNUAL CONVENTION, held at Atlantic City, the National Wholesale Lumber Dealers' Association appointed a strong committee on terms of sale. This committee is made up of men who are recognized throughout the lumber world as "thinkers."

The report of the terms of sale committee at the time of the convention developed what was probably the most interesting and most important session of the meeting. It is recognized pretty generally throughout the trade that there is considerable variation in terms as used by even the membership of the same association in various parts of the country. There has been considerable discussion during the past year all over the country concerning the application of terms. It has been recognized that the most satisfactory results could come only from uniformity. Hence, the convention reaffirmed its approval of the terms adopted in 1902, and approved of the form of order blanks and acknowledgments bearing these terms, recommending their use by the members.

The committee referred to has just issued a communication to the members of the association calling particular attention to the form approved and urging that in all their transactions the membership cooperate with each other in insisting that the terms of sale are as much a part of the contract as is the price at which the lumber is sold. Terms of sale were never intended as a mere matter of business red tape. They were designed originally to serve a specific purpose, that purpose being to inform the purchaser under just what conditions he bought the stock purchased, or more specifically, they were cited as the conditions under which any contract for purchase was let. For this reason they were certainly to be considered as terms of the contract. Therefore it is inconceivable that the purchaser of any commodity has any more right to lengthen the time in violation of the terms than the seller has to raise the price after it has once been fixed by contract.

It is as simple as the most fundamental problem in arithmetic that ignoring time of settlement in terms of sale has the effect of lowering the selling price, and there is no conceivable reason why the purchaser of any commodity would be allowed to continually lower the price of the goods he purchases in good faith any more than the seller has an equal right to raise the price on a rising market.

It is unquestionably true that by working together in a business-like manner the lumber trade can impress upon the buying trade the justice of these contentions, and that with the uniform adoption and adherence to the terms of sale suggested, a much more satisfactory condition will be brought about throughout the trade than now exists.

Baltimore Exports Foreign Barometer

A PECUIAR SITUATION is shown in the figures compiled covering exports of logs and manufactured lumber from the port of Baltimore to European ports and points in the United Kingdom. The report covers the first six months of 1913, and with very few exceptions, up to the first of June, the entire list for every month showed an increase of decided proportion.

Figures for June, however, developed a different condition of trade for that month, and in themselves would indicate that the export business was even then beginning to show a slump. However, it is never safe to count too strongly on the significance of such figures, as in the export trade a fat month will very often be followed by an extremely lean month, and *vice versa*, so that figures from month to month generally do not develop the importance that they apparently should.

However, the indications at present for Baltimore export trade are that a very unsatisfactory condition in the foreign market is being reflected in the export trade. The high prices during the winter months had an astonishing effect upon the volume of export shipments, as, with the vast profits to be derived, everybody having lumber suitable for foreign trade naturally wanted to get his share of them. This has unquestionably led to shipments in excess of the probable market with the result that in the course of a few months after the beginning of the year some little accumulation of stocks was felt abroad.

This condition might not have manifested itself had it not been for the fact that for several months Europe has been very much stirred up because of the difficulties in the Balkan states, both during the Turkish war and in the hostilities following the settlement of that conflict. It may be and may not be true that the Balkan situation was the primary factor in affecting the present unsettled and unsatisfactory state of the condition of trade throughout the larger European countries. It probably is not, but nevertheless this condition exists and the evidences indicate that the export business during the next few months will not be satisfactory.

It is difficult even for those directly connected with foreign trade conditions and daily in touch with foreign markets to forecast the probable trend of trade conditions during the next four or five months. However, it is safe to assume that developments in this country regarding the purchase of wood supplies will be analogous to those of England and the European countries on the Continent. The fact that June figures showed a falling off from June, 1912, and from May, 1913, while apparently disconcerting in themselves, should not be looked upon as absolute proof that a big slump is imminent. The various peculiar factors are unquestionably making themselves felt, and it is probable that with the settlement of the Balkan difficulties a much more favorable condition will appear in European circles and this condition will be reflected in the export markets of this country.

Is Hemlock Disappearing?

THE STATEMENT has recently been made by a manufacturer of hemlock and hardwoods in the North, a man who is well qualified by ability and opportunity to accurately and closely analyze conditions in the northern woods, that the days of hemlock are numbered. According to the statement of this man, which is corroborated by statements of many other large manufacturers in the same section of the country, there has been for several years a marked decrease in the cut of live, hardy hemlock timber and the total cut for the past few years has been maintained only by utilizing closely the dead, down and mature stock which would otherwise have been an utter loss. It is further predicted by this same man that the next five years will see hemlock production reduced to a point where it will not command as serious consideration as a factor in northern production as it does today. In fact, one of the biggest Michigan hemlock producers states that next year his hemlock cut will be thirty-three and a third per cent less than it is this year.

The reason for this remarkable change is the fact that hemlock in the woods is extremely susceptible to outside influences. It has been noted time and time again that the least suggestion of a forest fire around the roots and trunk of hemlock timber will surely result in its death in the course of a year or two. Furthermore, the mere fact of cutting away hardwood timber around it and disturbing its natural environment seems to have an immediate effect upon it. Nor can hemlock timber stand up as steadily against wind-storms as do many of the other northern species.

This statement, which is surely correct as applied to Michigan and presumably is partly correct as applied to Wisconsin, makes it apparent that northern manufacturers cutting any amount of hemlock stumpage should use every effort to utilize as speedily as possible such hemlock timber as is becoming mature or as is felled by wind-storms or deadened by forest fires or other causes. To leave it in the woods for any length of time invites destruction by decay and infection of insects while to utilize it soon after death insures the production of just as good quality of stock as will be produced from the finest young trees in existence. The suggestion of the man referred to brings a new thought to mind and one which probably has not occurred to very many of the large owners of stumpage in the states where hemlock is found in such abundance.

Association Value Proven

IT IS A PRETTY WELL RECOGNIZED FACT that in no part of the country is there a closer harmony among lumber manufacturers than exists among the members of the two northern hardwood associations, namely, the Northern Hemlock and Hardwood Manufacturers' Association of Wisconsin and upper Michigan and the Michigan Hardwood Manufacturers' Association. This close working together is seen in a great many ways. It is noted in the freedom with which the members discuss conditions, sales, prices and credits in their meetings; it is seen in the cordial way in which they greet each other when getting together; it is seen in the very effective work being done by both these associations for the benefit of their members. The proof, however, does not come so much from mere observation of the members themselves as individuals, but rather is shown in the results of this working together, one of the most striking of which is the present condition of stocks and prices among northern manufacturers who are members of either of the associations referred to. These conditions are told in detail in other parts of HARDWOOD RECORD of this issue but they surely prove to the country that northern hardwood manufacturers are in much better shape than

are hardwood manufacturers in any other part of the country, both as to total stocks on hand, stocks on hand unsold, and prevailing prices realized from sales. The northern manufacturer's lumber is probably no better than is the lumber of the southern manufacturer, nor is the product of the northern mills any better suited to the purpose for which it is used than is the product of the southern mills for its particular purposes. It is simply a condition which has been brought about and maintained by the close working together of the members, their absolute sincerity in their dealings with each other, and their absolute lack of fear of the trustworthiness of their competitors.

As stated by the manager of one of Michigan's biggest operations, there is less warring among the manufacturers than formerly. They may have grievances but they hesitate a long while before laying themselves liable to the inevitable loss resulting from entering a commercial battle with a competitor on an unnatural basis. Furthermore, with a better understanding of each other, the feeling of the various members as regards their competitors seems to be broader and bigger than in former years. This is more or less of an ideal condition but it is one which, if general throughout the lumber producing states of the country, would unquestionably result to the vast benefit of the lumber industry as a whole.

Loss and Damage of Freight

ACCORDING TO A RECENT REPORT the per cent of loss and damage of freight to total revenue on the various railroads of the country increased more than 33⅓ per cent from 1902 to 1912. The total payment on damage claims was more than twice in 1912 what it was ten years before. The latter condition is due as much to increased total revenue indicating increased shipment, as it is to increases in the actual damage, but nevertheless the percentage itself is a strong indication in that it shows that there has been a marked acceleration in loss with the increased use of the fiber container.

The percentage of damage to freight revenue in 1902 was .915 and in 1912 was 1.288. In 1911 it was 1.277 and in 1910, 1.140. The figures for these three years note an increase in loss to the railroads simultaneous with the increase in shipments in containers other than those made of wood. This is merely another proof of the fact that the wood container is in most cases superior to all others.

Favor Higher Rates

IN AN INTERVIEW published in a manufacturers' publication one of the largest shippers in the country, J. Ogden Armour, is quoted as saying that he favors the granting to the railroads of a general increase in rates. Mr. Armour is quoted further as saying that all rates should be increased and at once; that they are far too low to enable investors to get fair returns from their investments, and an increase in rates should result in immediate improvements in all trades and commerce.

Mr. Armour contends that everybody should be willing to have the rates raised, when everybody would find improvements which would benefit them. There is too much interference in this country, according to the prominent citizen in question, by the government with the manner in which the railroads conduct their business.

The same articles quotes various other shippers of enormous quantities of freight, all of whom hold the same opinion as expressed by Mr. Armour.

Theoretically, the contention of these men is undoubtedly based on logical deductions. It is unquestionably a fact that if the railroads secured greater revenues and *if* the railroads immediately sank this added income in improvements of service and extension of lines, developing new territory, the country in general would prosper.

It is equally true that if the railroads were given added earning power their stocks would immediately attain a much more favorable condition. This condition would certainly be reflected on stocks in general. Furthermore, with the railroads feeling that they were earning all they could possibly be expected to, they would certainly feel more inclined to get into the purchasing market themselves.

On the other hand, it is argued that while the railroads would, of course, earn more if they were allowed the proposed advances in rates, the increased revenue derived would not be turned into development of new territory, but would be diverted into other channels, and that is the point on which the matter hinges. There apparently is no way of proving the justice of either side of the controversy and insofar as the public concerns itself with such questions it is pretty much up in the air as to whether or not it would feel any favorable effects from the advances sought by the railroad companies in the East.

On the face of it it seems that it would be a difficult matter to convince the average consumer that he would be benefited by raising the cost of the commodity he buys to the extent that the cost of shipping it is increased. It is a safe bet that ninety-nine per cent of the population of the country would prefer "a bird in the hand," as exemplified by the present level of rates, to the "two birds in the bush," as exemplified by more or less emphemeral dreams on the part of the railroad officials regarding the possible development of new territory, the opening up of new lines of consumption, and hence increasing the general prosperity of the country.

An effort has been made to graphically show the situation in a cartoon appearing on page 19 of this issue of HARDWOOD RECORD.

A Business Administration

THE ABOVE DESIGNATION is occasionally applied to the administration of an incumbent of the White House at Washington. It is more frequently applied to the administrations of various officers holding office in the different trade associations of the country. It is nowhere more strikingly apparent than in an association directly connected with the lumber business; an association which stands as the father of lumber associations, specifically the National Lumber Manufacturers' Association, headed by R. H. Downman, of New Orleans, La., with J. E. Rhodes, Chicago, as secretary and manager.

Mr. Rhodes, of course, has to do with the active administration of the affairs of the association, and it is probably due to his efforts more than to anything else that the National Lumber Manufacturers' Association has attained the vastly important position it now occupies. Instances are constantly coming to light tending to prove the absolute capability of Mr. Rhodes for the position he now holds. One of the latest of these is the decision governing the handling of news matter pertaining to the association, to the lumber trade press. A rule has been adopted that all news matter will be mailed to all trade publications simultaneously, thus insuring all the papers getting the same advantage of news notices. At the same time the association announces that it will do everything possible to get the information to the papers while it is still fresh.

It is this very spirit of co-operation which makes Mr. Rhodes popular with the lumber trade publications of the country. HARDWOOD RECORD heartily endorses his decision and believes that it is merely another instance proving that the present policy of the National Lumber Manufacturers' Association is one which will render it one of the most powerful trade organizations in the country.

A Midsummer Day Dream

THERE IS ABUNDANT EVIDENCE of summer but none of oppressive heat and humidity in the picture appearing on the front cover of this issue of HARDWOOD RECORD. It may properly be called a midsummer day dream; and though there is no Shakespeare available to put it in the form of dramatic comedy, every man can do that for himself as he sits in his office or toils in his workshop, and yearns for the eternal hills, the pathless forests, and the brook that goes on forever.

The picture represents a cascade in Little river, Tennessee. The photographer caught it at an opportune moment. The shadows are exactly right from the viewpoint of the artist. The apparent abundance of sunshine above is filtered down through the roof of leaves and branches, and just enough reaches the rocks, water, and tree trunks to give the proper flash and glint of highlights. The velvety softness of the dark areas are rare effects which nature often shows but the camera is seldom able to reproduce as faithfully as it has been done in this picture.

As to what lies below the foaming surface of the pool, each one's imagination must decide independently of any outside suggestions.

Pert, Pertinent and Impertinent

A Lumber Salesman

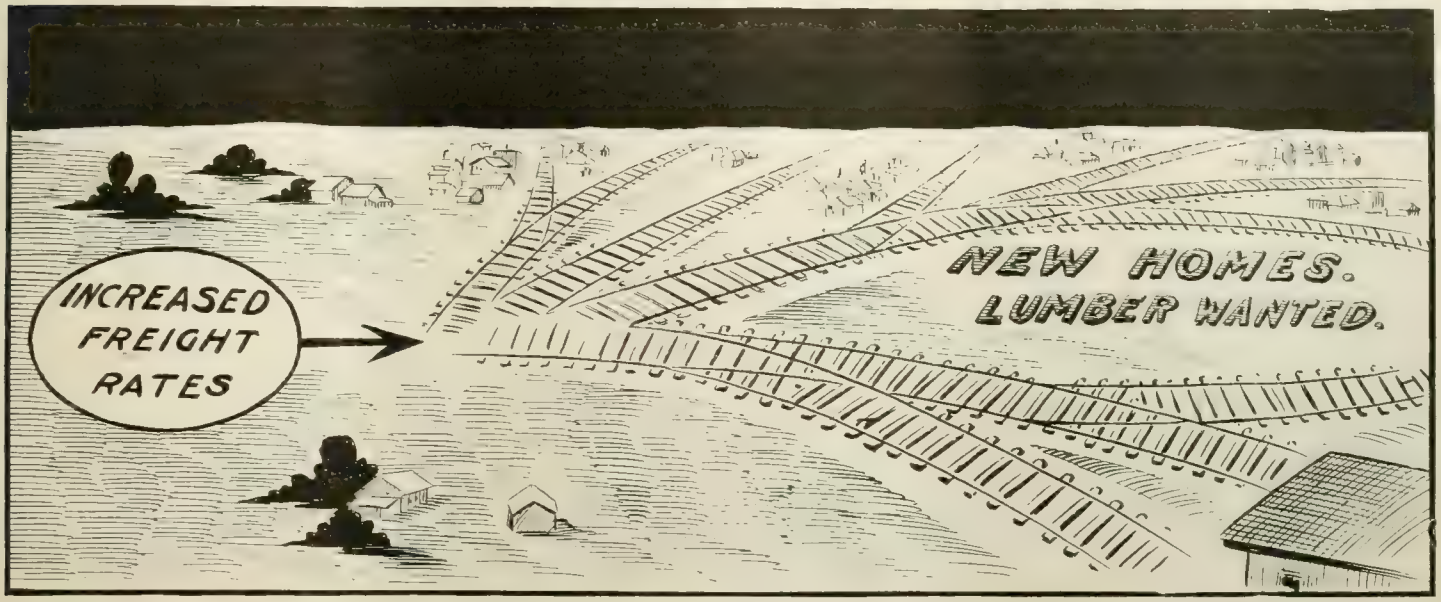
When the train pulls in and you grab your grip,
And the hackman's there with his frayed-out whip,
You call on your man and try to be gay,
And all you get is "nothing doing today,"
Then you're a Peddler,
By gad, you're a Peddler.

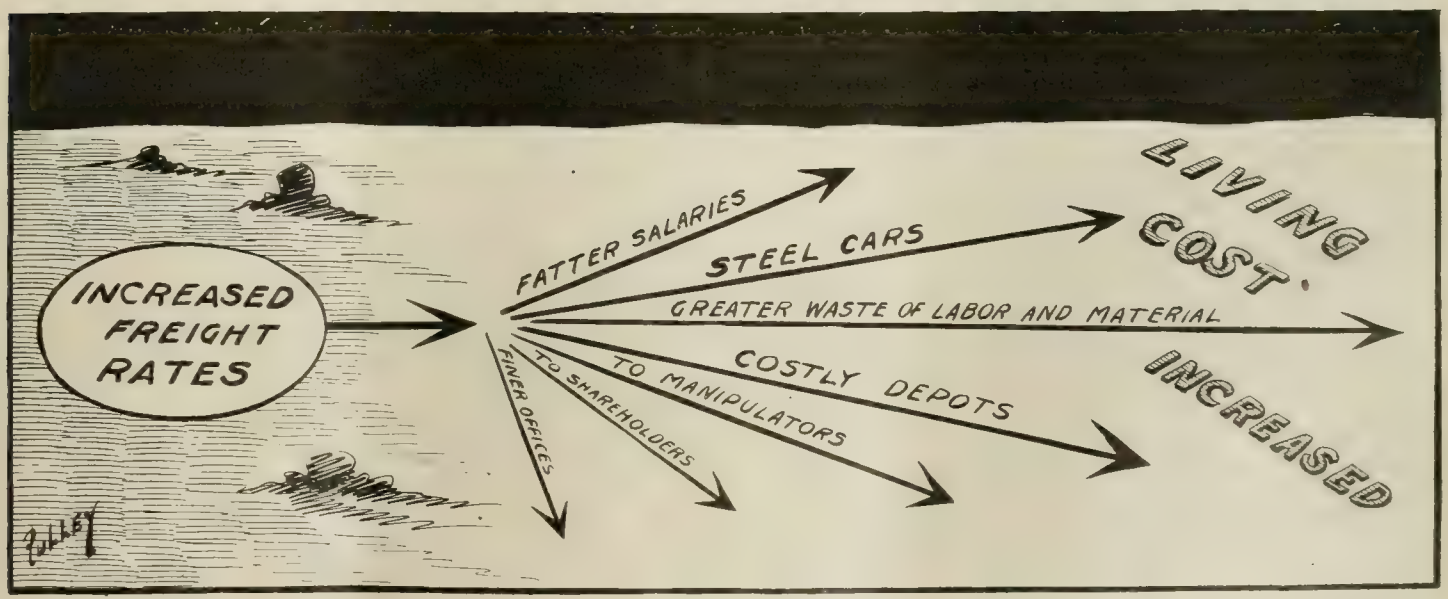
When you get into town and call on your man,
"Can you see me Bill?" "Why sure I can."
You size up his stock, make a [illegible] count, and Bill presently
Says, "Send the usual amount."
Then you're an order Taker,
By gad, you're an order Taker.

When you travel along and everything's fine,
And you don't get up till half past nine,
When you see each concern and talk conditions,
And write it all home with many additions,
Then you're a Traveling Man,
By gad, you're a Traveling Man.

When you call on your trade and they talk "hard times,"
"Lower prices" and decided declines,
But you talk and smile, make the world look bright,
And send in a nice fat order each night,
Then you're a Salesman,
By gad, you're a Salesman.

TWO VERSIONS





It Is a Wise Man Who Really Knows From Which Standpoint Proposed Freight Rate Advances Are Justified

Nine Points in Her Favor

The lovely girl, having lingered a minute in her room to adjust her transformation, change the angle of her Grecian band and make sure that her skirt fitted like the peeling of a plum, descended to the parlor to find the family pet ensconced upon the knee of the young-man caller, her curly head nestled comfortably against his shoulder.

"Why, Mabel!" the young lady exclaimed; "aren't you ashamed of yourself? Get right down."

"Sha'n't do it," retorted the child. "I got here first."

A "Dickens" of a Salary

While an Irishman was gazing in the window of a Toronto book store, the following sign caught his eye: "Dickens' Works all This Week for only $4.00."

"The divvle he does!" exclaimed Pat in disgust. "The dirty scab!"

Available Foreign Hardwoods

FIFTH ARTICLE

COMMERCIAL HARDWOODS FROM BURMA AND INDIA

Editor's Note

Following is the fifth of a series of articles on foreign hardwoods available for use in this country. The first covered hardwoods available in the Central American countries; the second covered hardwoods available in South American countries; the third covered hardwoods of Africa; the fourth covered hardwoods of Ceylon, and the sixth will cover hardwoods of Hawaii.

India is generally considered as a country having a vast area covered with extensive tropical forests. It is true there are hardwood forests along the coast which are practically impenetrable, and large areas of the finest timber trees in the world are found in many parts of India. For centuries the timber trees of India have suffered destruction by axe and fire, and there was danger at one time that the whole country would become barren, because a country without forests is likely to be afflicted with alternate floods and droughts. The work of protecting the forests was therefore begun in India in about 1844,



UNLOADING LOGS BY HAND

which has been gradually extended and is now placed on a thoroughly scientific basis.

The area of government forest land now under protection amounts to about 240,000 square miles, or about one-fourth of entire British India. Practically all of Burma is state land and a more or less continuous belt of government forests occurs along the Himalayas. In India proper there are extensive stretches of forests scattered through the central provinces, as well as along the Coromandel and Malabar coasts. These forests are now guarded against fire, and trained foresters see to it that there is no waste in cutting and that smaller trees are not destroyed. They provide for the maintenance of seed-bearing trees and the reforestation of regions denuded of trees. Forest revenue is raised by the sale of timber or other produce and by the issue at specified fees of permits to graze cattle, or to cut timber, make charcoal, gather firewood, bamboos, canes, and other minor forest products.

This valuable asset of 240,000 square miles of forest land which may hereafter be further extended in Burma and India proper is now being systematically preserved. This means that there are in India practically for all time public forests which would completely cover an area twice as large as England, Scotland, and Ireland. Outside of these reserves are immense tracts in private hands, the timber of which is made available. The mountain slopes of the western ghauts are still covered with the splendid vegetation of virgin forests of the tropics, and include among the many woods used largely for domestic purposes such important timbers exported to Europe and America as teak, ebony, ironwood, Indian mahogany (padouk) and sandalwood.

Burma, including the Andaman Islands, has a large tract of its timberland reserved, and enormous bodies of virgin forests occur here. The bulk of the timber which comes to the English and American markets from the East Indies is derived from the extensive forests which grow along the banks of the Irrawaddy river, and on the Andaman Islands. Here the rainfall is 120 inches annually, but the sawmills run all year round. There are a great many mills now operating and they all cut teak (*Tectona grandis*) wherever it can be obtained. Elephants and caribous haul the logs to the landing places. The elephants are indispensable in any logging operation, because they roll the logs into the water and bring them out of the water and place them on the carriages and later deliver the sawed material on the docks where they are loaded for shipment. Teak wood has a steady market in all parts of the world and is usually sold by the weight. It weighs about 47 pounds per cubic foot and is sometimes sold for 2 cents per pound, or about $1.00 per cubic foot.

One writer on Indian timbers states that the teak is probably the best known of all tropical woods. It has a wider range of usefulness than any other and has become the standard for estimating the value of other woods from the rest of the world. Other woods surpass it for special purposes, but for general utility there is none to equal it. Moreover, the way in which it adapts itself to cultivation on comparatively poor soil makes it certain that it can maintain a place in the world's market indefinitely.

The timber in Burma is owned entirely by the government and the forest land is leased to the millmen at a certain rate per log, which is imposed by government agents as the timber floats down the rivers. A diameter limit is followed in cutting teak, which is the most valuable timber now cut on an extensive scale. But even with this restriction, teak is growing scarcer and more valuable each year. With all of its desirable qualities, which make it so useful for a great many purposes, it is almost a wonder that the species has not been entirely obliterated during the long period of years it has been exploited. The fact remains, however, that it reproduces itself



ELEPHANTS UNLOADING LOGS

very rapidly, and the new trees become valuable within two hundred years from the seedling. Although the trees do not grow in groups, but seldom more than from one to four merchantable trees to the acre in a virgin tropical forest, there are many young trees coming up which grow rapidly. Even in Burma, where teak attains its best development, it forms only a very small proportion of the forest trees, the greater part of which consists of various trees, mostly growing much faster than teak and much more able to propagate themselves by natural means, but almost all of which are, in comparison with teak, at present of very little or no value.

Next to teak the ebonies of India and Burma are perhaps the most important woods commercially. There are more than forty species of the genus *Diospyros*, which are found in the East Indies and the heartwood of a number of these trees forms the ebonies of commerce used for ornamental purposes and for engraving and turnery. The Coromandel wood or ebony (*Diospyros melanoxylon*) is to India what the original ebony of commerce (*Diospyros ebenum*) is to Ceylon. Coromandel ebony is found very plentiful throughout the southern forests, seldom, however, of greater diameter than one foot. The wood of a closely allied species (*D. tomentosa*) is also cut and sold as Coromandel wood, because the two timbers are very difficult to be distinguished one from another, and for commercial purposes may be



LARGE TEAK LOG IN BAMBOO FOREST

considered as the same. The outturn of Coromandel wood is far greater than that of the true or original ebony of Ceylon, and it can be procured in large quantities throughout southern India. The prices vary, according to the size of the heartwood.

Andaman marble-wood or zebra-wood (*Diospyros kurzu*) is another species which is exploited more particularly in the Andaman Islands and in Burma, where the tree attains a moderate size. The wood is hard, heavy, strong, close and straight-grained, takes a very good polish, but seasons with difficulty, and is liable to split. It weighs about sixty pounds per cubic foot. The wood is used for making fancy furniture, and a good deal of it is shipped to China and Japan for carving, picture frames, and walking sticks. It is rarely imported directly into this country from the Andaman Islands, but comes here as reshipments from the London and Liverpool markets.

East India satinwood (*Chloroxylon swietenia*) has already been referred to in the discussion of the available hardwoods of Ceylon in the issue of June 25. The wood is exported to Europe chiefly from Ceylon. The outturn of the Indian forests is very small. This wood is quoted in the London markets at from sixteen to thirty cents per board foot.

Blackwood or rosewood (*Dalbergia latifolia*) grows in the peninsula and northern parts of India in greater or less abundance. It attains to an immense size, the trunk sometimes measuring five feet in diameter, exclusive of the bark. It is one of the largest mountain trees in India. The wood is very hard, heavy (about fifty pounds per cubic foot), strong, and exceedingly tough. It takes a very good polish and is used extensively for cabinet work, boat and ship-building, agricultural implements, and for construction purposes. It is the most valuable wood in southern India, and large quantities of it are cut annually for export to England. Small shipments of this wood come to this country through the London and Liverpool markets.

The shisham rosewood (*Dalbergia sissoo*) is a closely related species growing chiefly in the western Himalayas. Its timber is hard, strong and heavy, a cubic foot weighing about forty-eight pounds. In appearance, when polished, it is little inferior to the blackwood, and is used generally for the same purposes. It is exported less extensively because there is a demand for it in India for use as cross-ties and for various other economical purposes.

Wuma tree or poon (*Calophyllum inophyllum*) is a beautiful tree, which grows on the west coast of the peninsula. It yields a hard, red, tough, moderately heavy (about forty pounds per cubic foot), close-grained, and handsomely-veined wood, which resembles mahogany in appearance and working. It is used extensively in India for making furniture and it has recently been introduced into the English markets. This tree is closely allied to the Santa Maria (*Calophyllum calaba*) of tropical America. The latter is now being introduced into the American markets as a substitute for true mahogany. Several other species of this genus are natives of India, but their woods are not likely to reach the American markets for some time.

Toon or red cedar (*Cedrela toona*) is not a coniferous wood, as the name "red cedar" would indicate. It is a tree closely related to the Spanish cedar (*Cedrela odorata*) of tropical America. This tree is widely distributed throughout the East from western India to the Philippine Islands. It is one of the largest and most valuable timber trees in the East Indies. The wood is of a dull rose-red color, moderately hard, light (about twenty-eight pounds per cubic foot), strong, tough, and takes a very good polish. The timber seasons quickly, and is very durable in contact with the soil. It does not warp or split, but is apt to expand and contract with the changes in the temperature and moisture. The wood is used for making furniture, interior finish of houses, boat building, tea chests and cigar boxes. Like the cedar and mahogany in the West Indies, toon is used for making the dugouts in the East Indies. It is said that boats constructed out of this wood will last almost indefinitely. It is quite probable that toon will be introduced into the American markets sooner or later to take the place of the rapidly-diminishing supply of the Spanish cedar.

Sandal wood (*Santalum album*) is a small tree from twenty to twenty-five feet high, and is found chiefly in southern India. The exports of sandal wood from Madras to Bombay, Bengal, Pegu and the Persian Gulf are considerable. The wood is hard and fine-grained, and the best grades of it are used for some descriptions of cabinet work and various carved ornamental articles, such as fans, writing desks, work boxes, album covers, and many other articles. But the chief characteristic of this wood is the remarkable odor,



FLOATING LOGS DOWN STREAM

which is due to the presence of a peculiar oil much used by the natives of India as a perfume. The wood is used extensively for burning the dead bodies of the rich in India. In its powdered state it is employed by the Brahmins as pigments used in their distinguishing marks. The oil forms the basis of many scents, and is sometimes used for impregnating articles from common wood, and passed off in the market as if manufactured from true sandal wood.

For the first time in the history of the United States this country stands first in exports. England long held that place among the nations, but has finally reached the parting of the ways and surrenders that leadership to America. For 1912 England's exports were worth $2,435,000,000, those of the United States $2,460,000,000. Next after England in amount of exports is Germany, while France is third, and the Netherlands fourth.



F. L. RICHARDSON, ALPENA, MICH., RE-ELECTED PRESIDENT.



C. A. BIGELOW, BAY CITY, MICH., RE-ELECTED FIRST VICE-PRESIDENT



D. H. DAY, GLEN HAVEN, MICH., RE-ELECTED SECOND VICE-PRESIDENT

Michigan Manufacturer's Annual

The seventh annual meeting of the Michigan Hardwood Manufacturers' Association was held at the Pontchartrain hotel, Detroit, Mich., on Tuesday, July 22.

The meeting was called to order at 10:00 a. m. by President F. L. Richardson, who stated that reports to be read were so exhaustive that discussion by him was unnecessary.

Following the roll call and the reading of the minutes of the previous meeting, Secretary J. C. Knox read his report as follows:

Secretary's Report

As this association was organized at Ottawa Beach July 13 and 14, 1906, we are therefore holding today our seventh annual meeting.

In comparing the list of members present at the original meeting with our present membership, I find that almost one-half of the firms or interests represented at that time have cut out and discontinued the lumber business.

Our membership has been strengthened by the addition of a number of good substantial manufacturers' during the past year which has just about offset those manufacturers cutting out and quitting this year. Among the most recent acquisitions are the Loud Lumber Company with mills at Charles, Mackinac county, and the Marshall Butters Lumber Company with mill at L'Anse.

I wish to congratulate the association on the character and stability of its organizers, its officers, directors, committeemen and members and to repeat that the Michigan Hardwood Manufacturers' Association has obtained a reputation for completeness of reports, results of its committee work and general efficiency second to none in the United States.

Our financial affairs have always been in good shape from the fact that we levy only one assessment per year and have our funds in hand for regular and emergency needs. Our treasurer reports on hand July 15 a sum sufficient to carry us through the year.

Our Forest Fire Protective Department is on its second year of existence and has already established a well-earned title of "on the job all the time" during the fire season of patrol. Chief Warden Hickok's report for the past two months will give you an idea of what has been accomplished and he solicits your further hearty co-operation with him and his wardens. The automobile purchased at the beginning of the season has made it possible to reach many localities not touched last season and will undoubtedly prove a wise investment.

Assessment No. 3 for account that department, levied May 3, 1913, has produced $7,137.95, and there will be due in addition to this $2,624.44, thus realizing $9,762.39 on basis of 325,413 acres at three cents per acre. This amount will without doubt carry the department through the entire season and at a reduction in the assessment of one cent per acre.

We are pleased to state that after a number of years of hard work and at some little expense we have finally won out in our Pacific coast rate case, obtaining for members an eighty-cent rate and reparation on eighty-cent basis reaching as far back as August 1, 1908, to all parties in original complaint.

The northern lumber industry as a whole is on a very satisfactory basis and our stock reports on both hardwoods and hemlock for July 1, 1913, as against reports rendered July 1, 1912, and back to the beginning of our organization, show an extraordinary condition as to northern hardwoods and hemlock so far as Michigan is concerned. Our market conditions committee report today will verify this statement.

Our grading rules committee, together with that of the Northern Hemlock and Hardwood Manufacturers' Association and the many manufacturers and friends who aided us in obtaining the changes in the grading rules for hardwood lumber at Chicago, June 5 and 6, are to be congratulated on the results obtained, which change was in reality more a question of recognition of the northern hardwood manufacturers than an actual result in changes in grades.

Your secretary has made several business trips during the quarter ending July 1, called on a number of members and has been instrumental in adding a number of additional members to the association during that time. We shall be pleased to have suggested to us additional names of manufacturers for membership.

The report of the treasurer showed a balance on January 16 of $7,181.15. Received since then, $758.98. Total expenses up to July 15, $2,286.92, making the balance on hand July 15, $5,653.15. The financial statement of the Forest Fire Protective Department of the association showed that that body is also in excellent shape financially.

The reports were adopted.

The reports of the various standing committees then followed. Henry Ballou reported for the railroad committee, speaking mainly of efforts to induce railroads running through the state to equip their locomotives with fire screens. They have been successful in this work.

F. A. Diggins, chairman of the legislative committee was not present.

D. H. Day, chairman of the grading rules committee reported for that committee, merely reviewing the work on changes in grading rules prior to the recent meeting of the National Hardwood Lumber Association. He also read various changes in the rules as adopted by that association.

C. A. Bigelow, chairman of the forest fire committee referred the association to Chief Warden Charles F. Hickok of the Forest Fire Protective Department. Mr. Hickok reported that the month beginning June 1 was the opening of a severe dry period accompanied by fierce winds. These conditions prevailed up to June 20 and inasmuch as there was no rainfall during these weeks, the fire days were continuous and the task of fighting them arduous.

Farmers of every locality took advantage of the dry weather

to burn their slash. According to the report ninety per cent of this was done with care, and caution was taken to confine the burning 'to the owners' property. However, there are still some careless ones who allow fires to escape, and serious fires would have resulted had the department not taken prompt measures to confine them to areas apart from the timberlands. It is believed that most of the settlers in the timbered area having land to clear are in favor of careful use of fire. Fear of the law in cases where carelessness has been noted has acted as a decided stimulus and has had a favorable result in keeping down fires.

Reports stated that the average resident in the vicinity of forests is realizing the necessity of preventing forest fires, but that the task is by no means complete.

Since the early days of lumbering in Michigan the forest fire question has been entirely neglected, due perhaps to the prodigality of timber in Michigan. Careless use of fire became the custom and the terrible loss resulting came to be looked upon as a natural and unpreventable occurrence. However, the restricted timbered area and consequent higher value prevailing today makes the forest fire problem one to be carefully considered.

The report stated that comparison of recent fires and those of the past indicate that a serious and dangerous period has been weathered. Statistics show that the loss during the dry season of 1913 when the forests are under close supervision, was much less than any other year. According to the report, the wardens are loyal and hard workers in every case.

The report stated that 25,260 acres, mostly of slash lands, were burned over during the month of June. Not one-half of one per cent of this area was covered by standing timber.

The report states that the railroad companies are showing a much more satisfactory attitude in the matter of guarding against fires by using screens in their locomotive stacks and keeping clear the right of way. He said that there are yet railroads who have not taken care of these questions but that it is expected they will fall in line within a short time.

The report showed that on the 25,260 acres of land burned the total actual loss in wood, posts, ties, logs, camps, standing timber, bark, cordwood, etc., was only $3,986.20, which offers a remarkable showing in view of the losses in past years.

Mr. Hickok then outlined a plan for the general regulation of slash burning.

The wardens are instructed while visiting townships in their districts to call on town supervisors and present to them a plan whereby slash existing in any township, which in dry periods is a menace to the residents and property owners, may be burned on a day selected by the supervisors and that the settlers be requested to assist in the burning of this material. Lumber companies having camps in the vicinity will also be asked to assist on that particular day with as many men as are needed. The burning is to be done under the direction of the supervisor and the association warden at a time when the fires can be controlled. The arguments set forth are that by burning in this way the townships will be saved a great deal of money that they would probably lose if the brush were left to be burned with the possibility of spreading fire to the surrounding property. The report states that present indications are that the plan will be generally adopted.

The report said that several operators have taken advantage of the service made last year to have notaries appointed in their camps and by the sworn voucher system to collect from the township and state the money expended in fighting fires.

Warden Hickok stated that he is greatly pleased with the automobile purchased by the association for his use in fighting fires. He said that it increases the efficiency of himself and his men many times over, stating that he has already covered all eleven districts and will probably go over several districts a second time while with the old service of train and livery he reached only five of the districts last year.

President Richardson stated that the report on fire losses was particularly gratifying inasmuch as false reports had been circulated as to the enormous losses supposed to have been sustained in Michigan at various times and that in some instances insurance was immediately canceled in those sections.

Bruce Odell, chairman of the market conditions committee, submitted a report that was mighty gratifying to the membership. The report in full appears on another page of this issue of HARDWOOD RECORD. Mr. Odell supplemented his written report with the statement that the days of hemlock are numbered whether the tree be cut or not. He said that for the last few years Michigan operators have been aware of this condition and that within five years from now hemlock will be a comparatively small factor in northern production. He said that the cut of hemlock has been kept up during the past few years by the utilization of dead, down and mature timber but that his concern is cutting four times as much hemlock this year as it would have cut if only live timber were taken. He said this condition is due to the fact that hemlock will not stand civilization or forest fires and that, with any change in its surroundings or with the visitation of even the most harmless of forest fires, death will follow surely within two or three years.

The president then appointed a committee on nominations which, after a short recess, returned its report, recommending the re-election of all the officers for the past year, namely:

PRESIDENT—F. L. Richardson.
FIRST VICE PRESIDENT—C. A. Bigelow.
SECOND VICE-PRESIDENT—D. H. Day.
TREASURER—C. T. Mitchell.
SECRETARY—J. C. Knox.

The meeting then adjourned.

Tannin Content of Southern Oak Barks

The decrease in available supply of chestnut oak and tanbark oak for tanning purposes has led to the introduction of a great many other tanning materials. It has also caused operators in oak timber to wonder if the vast amount of oak bark of various kinds now wasted could not be employed for this purpose. In order to test the character of such barks samples were recently collected and analyzed, giving the following results:

	Black jack Q. marilandica	Texan Q. texana	Black Q. velutina	White Q. alba	Finger Q. digitata	Post Q. minor
Total solids	18.00	14.52	26.46	17.53	20.27	19.41
Soluble solids	17.23	13.37	22.81	16.37	18.68	18.43
Insoluble solids	.77	1.15	1.65	1.16	1.59	.98
Non-tannins	6.51	7.44	9.36	7.09	7.62	8.05
Tannin	10.73	5.93	13.45	9.28	11.06	10.38

The tannin contents of any of these species is high enough to warrant the use of the bark, provided it can be obtained in sufficient quantities and will produce good leather. Tannin is not an uniform substance, but varies widely in different plants so that in practice it is necessary to use various blends to secure good results, depending on the kind of leather wanted. Tannin from any of the black oak group will produce harsh and stiff leather if used alone, but in mixture with chestnut oak tannin and hemlock tannin good results could be secured.

Another difficulty is in getting the bark peeled. It is necessary that this work be done at a season of the year when the cambium layer is soft—or as more commonly expressed "when the sap is up." This would mean that logging could proceed only during a couple of months in late spring and early summer or that the trees would have to be felled and peeled in advance of logging operations. These are objections which will not be worth overcoming until the present supply of the standard barks is more seriously depleted.

It is reported that those behind the proposed forest products exposition, which has just been put on a definite footing by the National Lumber Manufacturers' Association, will meet at Chicago on August 5, for the purpose of completing the incorporation of the exposition and the various details of financing and organizing.



RACE FOR MEN



RACE FOR MARRIED LADIES

Chicago Trade in Annual Picnic

Tuesday, July 15, was the date of the regular annual picnic of the Chicago lumber trade, the affair this year being the combined outing of the Lumbermen's Association and the Lumbermen's Club, the two organizations representing the local trade. The picnic grounds were located at Northwestern park, Des Plaines, Ill., on the Chicago & Northwestern railroad. In spite of threatening weather the evening preceding the picnic the skies cleared off beautifully for the picnic day and the grounds dried off very satisfactorily. The attendance exceeded the hundred mark, the visitors going out by train and auto.

A great deal of interest in the outing was stirred up this year by the live entertainment committee, composed of William Eager, F. B. McMullen, J. H. Dion, H. D. Welsh, F. L. Johnson, R. W. Thompson, Robert Sullivan and H. B. Darlington. The committee is entitled to a considerable amount of praise because of the excellent arrangements made for the transportation and accommodation of the visitors and also for the unusual expedition with which the various field events were handled. The taste displayed in selecting prizes is rather surprising. The variety and character of the prizes could not but please those fortunate enough to receive them. They consisted of various useful articles for the men and women, including umbrellas and various articles of personal wear and for household use. Each member of the winning ball team was presented with a suitable trophy.

The morning was given over to a ball game between the yellow pine and hardwood contingent of the local trade. Owing to the failure of the battery of the piners to make an appearance their places were filled by members of the hardwood team, which change did not detract from the interest of the game, which was exciting from start to finish, the yellow piners finally winning by a score of 4 to 2. The piners made seven hits off of Margraf, while the hardwood men made six hits off of Kimball, the yellow pine pitcher.



EGG RACE FOR LADIES

At the conclusion of the ball game a very satisfactory chicken dinner was served in the pavilion. Although it was announced that those in attendance could either bring lunch baskets or buy their dinners, comparatively few brought picnic baskets, most of them taking advantage of the ready-served dinner. As quite a number did not report that they would want to purchase their midday meal, the management of the park had not provided sufficient help or chickens for the occasion and as a result there was considerable scurrying around to secure a sufficient number of broilers to appease the appetities of the visitors. As it was, those who were tipped off to the possible shortage were



THE WINNING PINERS



THE HARDWOOD TEAM

fortunate in securing places at the first table. In order to expedite service, several of the more dignified members of the trade offered their assistance and appeared with aprons and trays, carrying orders, serving ice cream, washing dishes and performing various other more or less menial tasks.

The first event of the afternoon was a peanut race for girls under seven. They finished in the following order—Elsie Dion, Margery Hansen, Dorothy Trainer.

The hundred yard dash for men brought out the fact that the local trade has among its members some mighty good athletes. A. O. Ratcliff, the winner, ran away from the field, and it was learned afterward that he is a sprinter of considerable renown, having "done the hundred in ten flat." G. E. Attley and J. H. Dion finished second and third respectively.

The fifty yard race for single ladies was won by Nettie Buchser, with Laura Miller second. This and the race for married ladies, while rather good from an athletic point of view, was particularly striking in its demonstration of the practicability of the modern skirt, especially inasmuch as it amply demonstrated its ability to adjust itself automatically, without particular effort on the part of the wearer, to the necessary position in an event of this kind.

The race for married ladies was won by Mrs. Fletcher Marsh, Mrs. B. J. Atley being second and Mrs. Cone third.

The race for boys under seven did not show a very extensive field. This race was won by Tom Darlington, with Jack Hansen second and Tom Cross third.

Mrs. Fletcher Marsh also won the ladies' ball throwing contest, proving herself the star performer of the day in the ladies' class. Miss Miller was second.

The last two events proved to be the most interesting of all, being called the tie race and the derby race. The provisions of the tie race were that the men should choose their partners of the opposite sex, presumably their wives if they had any. The race consisted of a run from the line to the ladies who tied the men's ties, the men then running back to the goal line. Mr. and Mrs. Kemper were first and Mr. and Mrs. Trainer second. Considerable consternation was noted in the faces of the winning men when the prizes were presented to their partners.

The derby race, the last feature of the events, was a strenuous affair, in which each man carried his partner to the changing point, at which place they reversed and the man doing the riding during the first lap of the course had to do the heavy work for the last. The Ratcliff-Jennings team ran away from the field in this event.

After the athletic events on the grass the spectators were treated to a similar series of events occurring in the so-called ball room of the park, the events this time being accompanied by music and the actors performing various stunts going under different popular names, such as "tango" and its numerous variations, the "Boston" and similar events of athletic though humorous aspect. There were usually more watchers than performers, but it can be safely said that if the performers derived as much real enjoyment from the occasion as did the watchers, they were fairly bubbling over with this sensation after each event.

The program of the indoor events was concluded at 6:30, at which time the special train to Chicago departed from Northwestern park.

Transportation of Lumber

SECOND ARTICLE

SOME OF THE SHIPPING ITEMS

The transportation of forest products is one of the largest items in the business of railroads and other public carriers in this country. The tonnage is enormous, is widely distributed, and the average length of the haul is long.

Those who are accustomed to think of forest products as consisting almost wholly of sawed lumber are a long way from an understanding of the real situation. It is true that lumber is the most important item in money value and as a revenue producer for the transportation companies; but, surprising though the statement may be, lumber is not the largest item in this country's list of commodities commonly classed as forest products. It never has been the largest and it probably never will be.

As the term is usually understood, lumber is the product of the sawmill, and consists of planks, boards, beams, and other dimension stock of that kind. There are a number of other products, some of which never see a sawmill. The government, acting chiefly through the Census Bureau and the Forest Service, collects statistics from time to time, for the purpose of keeping tally on the output of the forests and to assist in its proper utilization. Some of the statistics are collected yearly, others every ten years, and still others at no stated time, but whenever it is thought desirable to do it. The figures become more complete every year, because the work is more thoroughly done. Up to 1820 no one seems to have thought of collecting data on lumber or anything else relating to the forests, and it was not until 1880 that anything approaching a satisfactory report was made; and it was twenty years later when a system was evolved for doing the work. Forest product statistics are quite fragmentary before 1899, and it was some years after that period before the present standard of collection and compilation was attained.

It is now possible to state with fairly close approximation what the annual drain is upon the forests of the country, to supply the people with the various commodities of wood which enter into their daily lives. This can be done without going outside of figures contained in government reports; and with the assurance that the figures are in the main correct, though absolute correctness is not claimed in any particular.

The accepted measurement of some forest products is in board feet, but all are not so measured in ordinary business transactions. Below is a list of forest products, taken from the latest available government reports, reduced to board feet by using the customary processes. The statement that all are from government reports should be modified in the case of fence posts, which will be more fully explained in a succeeding paragraph. The annual output of all forest products in the United States, as far as available reports show, is presented as follows:

Commodity	Board Feet
Firewood	51,600,000,000
Lumber	40,000,000,000
Hewed crossties	3,552,000,000
Pulpwood	2,456,000,000
Fence posts	2,000,000,000
Shingles	1,622,000,000
Distillation	870,000,000
Tanbark	647,000,000
Tight cooperage	600,000,000
Slack cooperage	555,000,000
Veneers	478,000,000
Lath	436,000,000
Poles	227,000,000
Unsawed exports	165,000,000
Excelsior	85,000,000
Total	105,293,000,000

This is an enormous quantity of material to be taken from the forests of the country, yet it is less than some eminent statisticians have estimated. Raphael Zon in his "Forest Resources of the World" places the annual consumption of wood in the United States at 23,000,000,000 cubic feet, which, according to the usual reducing factor, is equivalent to 138,000,000,000 board feet. It is preferable, however, to use the more conservative figures contained in the above itemized list of commodities which total 105,293,000,000 feet, board

measure. The fact that the quantity is itemized is important, because if errors are suspected it is easier to test the figures than when a single total is given without any items.

Transportation companies are interested in tonnage, and forest products supply a great deal of it. The weight of wood varies according to species and according to state of dryness. Many kinds of green wood weigh 5,000 pounds or more per thousand feet, while some dry woods weigh little more than half of that. Averages figured out for many kinds, and in different degrees of greenness and dryness, including lumber, ties, cordwood, poles, and other commodities, show that an average weight is about 4,000 pounds to the equivalent of 1,000 feet board measure. The average of lumber alone is not so much, but lumber does not constitute half of the wood cut annually. On the basis of 4,000 pounds per 1,000 feet, the total output of the country's forest products amounts to 210,000,000 tons.

It is not all carried by transportation companies, but a surprisingly large part of it is. In 1909 the railroads of the United States carried 1,556,559,741 tons of freight of all kinds, and the Interstate Commerce Commission's figures show that 11.75 per cent of it was forest products, or a total of 182,000,000 tons. On the 4,000 pounds per 1,000 feet basis, this represents 91,000,000,000 feet of such products, leaving only about 14,000,000,000 feet not carried by public carriers. In numerous instances the same material is carried two or three times after it leaves the stump and before it reaches the final consumer. That means that the actual material carried is somewhat less than 91,000,000,000 feet, and the quantity which is never handled by public carriers is more than 14,000,000,000 feet.

Firewood is usually not shipped far. It is heavy, and it supplies a great deal of tonnage, but the average short haul places it far below lumber as a revenue producer for carriers. It may be shown by statistics, which need not be reproduced here, that the average haul of all kinds of forest products in the United States is near 299 miles. Firewood probably has a shorter average haul than any other important forest commodity, and does much to reduce the general average to 299 miles.

Lumber is without doubt the largest revenue producer of all forest products. From the fact that statistics of lumber shipments are not generally kept separate from those of other products of a similar kind it is impossible to say what is the average length of lumber haul. Shipments go long distances, some entirely across the continent, others halfway across, and others from the Gulf region to the East, North, and West. The softwoods of the Lake states, and to some extent the hardwoods also, are shipped hundreds of miles, sometimes thousands. While Pacific coast sugar pine and Douglas fir are entering the Lake states' factories, hardwood flooring is on its way from the Lake states to the Pacific coast. Shorter hauls—though running into hundreds of miles—carry lumber into every corner of the country.

Railroads carry large numbers of crossties, not only for the use of the line on which this freight originates, but for connecting and distant lines. Ties are heavy and are not often thoroughly seasoned. Hewed ties only are listed in the foregoing table, because sawed ties are included in lumber.

Pulpwood is not usually carried far, and it belongs with the short-haul commodities. It is cheaper to erect the mill convenient to supply than to transport the wood long distances to the mill. It is not always practicable to do this, because some of the mills are driven by water power, and raw material must be brought to them, whether the haul is long or short.

Fence posts are an important commodity, demanded in all parts of the country and supplied by not less than one hundred kinds of wood. The total annual output is not definitely known, since government statistics and other figures on the subject are fragmentary. The total of 2,000,000,000 feet given in the table was reached by calculation based on the best available information. Many communities supply their own posts, and transportation companies are not called upon to haul them far, if at all; yet some posts are carried hundreds of miles. A single order of 100,000 Osage orange posts was recently shipped from Oklahoma to Illinois, and another of equal size went from the same region to Kansas and Nebraska. Western cedar posts are sent hundreds of miles eastward, and posts of northern and southern cedar furnish fencing material far away from the regions where the timber grows.

Shingles probably are carried farther than any other important forest product of this country. Nearly three-fourths of the whole output are made in the state of Washington and are distributed over the United States. They are made of western red cedar. Most of the others are of northern and southern white cedar, sawed in the Lake states and near the Atlantic coast, and the markets are hundreds of miles away. A few shingles are produced in all timbered regions of this country.

Most of the wood cut for distillation purposes belongs to the hardwood species; but the softwoods, particularly the southern yellow pines, are rapidly growing in importance. The hardwoods are converted into charcoal, alcohol, oils, and other articles; the pine into turpentine and rosin. The material is usually in the form of cordwood. Shipments are generally short. The most valuable hardwoods for distilling are birch, beech, and maple.

Tanbark is bought by the ton or cord, but statistics are in cords. Nearly all of the bark is hemlock and chestnut oak, and it is calculated that one cord is equivalent to 600 board feet. Tanbark is not a long-haul commodity, because it is customary to build tanneries contiguous to bark supply rather than haul the bark long distances to the tanneries.

Cooperage stock consists of staves, heading, and hoops. Tight cooperage is made into barrels meant to contain liquids; slack cooperage is for dry commodities. The cooper shop, where barrels are made, is the market for the staves, hoops and heading; and shipments of hundreds of miles are not unusual. Cooperage material is important as a revenue producer for the transportation companies.

Veneers follow much the same course as lumber in transportation channels, but the quantity is very small compared with the output of sawmills.

The manufacture of lath is as universal as the manufacture of lumber, for lath is a by-product of the sawmill. The supply being widely distributed, long hauls are not generally necessary. Any wood that makes lumber will make lath, but statistics do not show the various woods entering into the product.

Poles are classed with long distance shipments. They are produced in three principal regions of the United States—the western cedar country, the northern cedar country, and the chestnut range in the East. More than three-fourths are cedar. The prevailing species is the northern white cedar of the Lake states, but the western red cedar is rapidly coming to the front as a source of poles. Pacific coast poles occasionally reach the Atlantic states; but such shipments usually consist of poles of large sizes only.

Unsawed exports are so listed because exports of sawed stuff are included in the lumber cut. Some logs are hewed and others are exported in the round. They are generally carried by rail to the shipping ports.

Excelsior is of no great importance from the viewpoint of the transportation companies, because the quantity is rather small and it is not shipped far. The principal regions of manufacture are Wisconsin, Virginia, New York, and New Hampshire; but it is made in twenty-seven states, ranging from Maine to Washington, and 122 plants are engaged in turning out the product.

Simply Explained

Boston seems to have made desperate efforts to understand the esoteric significance of cubist and futurist art. A city that boasts so many thousands who can understand a Browning stanza when given backward on a phonograph, who can discourse learnedly on the most obscure passages in George Meredith, and can even tell precisely what Henry James intended to say, is not going to be puzzled easily by a mere cubist or futurist. The Transcript says that stout old gentlemen ran the risk of apoplexy by bending painfully double to view the paintings upside down; while aesthetic women would amble past the canvases to see whether the vibrations of motion would help them to grasp the secret meaning. And all the time the simple explanation was written legibly on a tag in the corner of each picture. It was the legend, "Sold."

The Steel Car Campaign on Again

Editor's Note

As noted in the text of this article it consists of a resume of various articles which have appeared in previous issues of HARDWOOD RECORD, the photographs all having been used with those articles.

The matter is here reproduced because of two facts. The first is that the steel car agitation is approaching a stage where it threatens to become a political issue at Washington, as there is even now a bill before Congress to prohibit the manufacture of wooden passenger, baggage and mail cars.

The second reason is that the matter has commanded the earnest attention of a small percentage of the more progressive element of the trade, and it is hoped that the repetition of previous stories appearing in HARDWOOD RECORD will have the effect of stirring up the trade to the realization of the dire consequences to the lumber business that would result from the passage of the legislation referred to.

It is stated on good authority that a determined effort will be made to have bills passed by Congress to compel all railroads in this country to employ steel passenger and mail cars in interstate business, and to abolish the use of those made of wood. It is quite generally believed that the movement is backed and engineered by steel manufacturers, whose purpose is to sell more steel. Nearly 2,500,000 cars of all kinds are in use on the railroads of this country and the quantity of wood demanded yearly for the construction of new cars and the repair of old ones does not fall much below two billion feet.

This will not be the first time the measure has been before Congress. Bills having the same object in view have been introduced before, and these will serve as entering wedges for legislation which, it is said, will soon be undertaken at the national capital.

Former measures were taken as follows: Congressman Esch, April 15, 1911, introduced house bill 5291, which was referred to the committee on interstate and foreign commerce, and was ordered printed. The purpose of this bill was to prohibit the "putting in use for the first time" of any wooden passenger cars after January 1, 1912. That bill proposed to give the railroads less than nine months to quit making wooden cars; but cars already in use might be continued. Nine months was very short notice to give carshops to change their equipments from wood working to steel working.

Two months and two days later Congressman Talcott of New York introduced house bill 11,822, which was referred to the same committee as the former bill. This measure was substantially the same as the first, but it extended the time in which change from wood to steel must be made to January 1, 1915, an addition of one year.

Three weeks later the same congressman introduced house bill 12,416. The bill, if passed, was to take effect the first of the following January—six months in the future. The bill prohibited the running of any wooden passenger or mail cars in a train between steel cars or between the engine and steel cars. That practically meant that wooden cars must be run only in all-wooden trains, or not at all. The bill was ordered printed.

Two weeks later Congressman Talcott introduced his third bill on the subject. It was No. 13,038, and followed the same route as the others—went through the committee and was ordered printed. It was a combination of former bills, with new features added. One was that after January 1, 1916, steel cars only should be used for carrying mails; and after January 1, 1918, all express, baggage and passenger cars should be of steel construction.

The import of bills introduced in Congress in the past indicates the lines of probable future legislation on the subject. The indications are that attempts will be made to legislate wooden cars out of existence on the railroads of this country, and there is danger that the attempt may be successful.

This brings up a broad question of policy. It involves the question of the comparative merits of wood and steel cars. If the question is to be decided on its merits, no progressive man will have a word of adverse criticism. The people of this country, irrespective of what business they may be engaged in, want the best railroad service that can be had. They want the safest, most comfortable and most economical; but safety and comfort must not be subordinated to economy. If wooden cars fill these requirements best, let the cars be wood. If steel is better, let the cars be steel. If a combination of wood and steel is found to be superior, let the cars be of the combination pattern. Lumbermen with products to sell will not oppose a steel car merely to sell their lumber.

The wooden car has been in service a long time. Its good points and its bad are pretty well understood. It is not claimed that all of the good points are known, for improvements in construction are still being made; but enough is known to warrant a pretty strong stand for the wooden car. Its enemies on one occasion sneered at wooden cars in a train wreck because they were "twenty-five years old." That was one of the strongest points ever put forth in favor of the wooden car—and it was put forth by an hostile critic. Cars that had stood the wear, tear, weather, abuse, accidents and hard usage of railroad traffic for a quarter of a century must have been made of pretty good stuff. The fact that they ended their long career of usefulness in a wreck at last is no more an argument against their sterling qualities than it would be good argument to say that Napoleon was a poor general because he finally lost at Waterloo.

In the opinion of some pretty good judges, it will be a long time before a train of steel cars twenty-five years old will figure in a wreck; because, long before they reach that age (unless they do better in the future than in the past) they will have jumped so many curves, bounced from the rails at so many crossings, and rattled so many bolts out and plates loose that they will have found their way to the scrap pile.

The relative efficiency of the two types of cars should be the deciding factor. That point cannot be decided dogmatically. Time and tests must tell. The steel car has not been in use long enough for thorough tests. Thus far some of the tests have been unfavorable, and the car has not yet won its way into the favor of a majority of experienced travelers.

The wooden car is more comfortable in warm weather because it is cooler and in cold weather because it is warmer. The temperature within is more equitable, because wood is a poor and steel a good conductor of heat. In moderate weather the difference in temperature between the two types of cars is not material, but it is during periods of extreme cold and extreme heat that the car's reputation must be made, and it is then that wood wins out. Some of the officials of railroads traversing the hot regions of the Southwest are decidedly opposed to the steel car, because of its oven-like temperature. Every traveler in the northern states in winter has experienced the discomfort of the metal sleeping car, and colds, neuralgia, toothache and rheumatism often follow a night spent behind the thin steel plates. In numerous instances travelers about to make a night journey apply

A LUMBERMAN'S OPINION

Ichabod T. Williams and Sons

New York, July 12th, 1913.

Henry H. Gibson,
HARDWOOD RECORD, Chicago, Ill.

Dear Mr. Gibson:

Your article on the steel car craze, in the July 10th issue of the HARDWOOD RECORD, is a very important contribution to the question of passenger car construction. We hope that it will call the attention of the lumber trade to this subject and that possibly through the various associations action will be taken that will result in the presentation of the matter to congressmen, as we quite agree with you that at the next regular session of Congress a great effort will be made to force the railroads to equip their lines with steel cars. We are quite sure that the practical operating officers of the railroads are not in favor of the steel car.

Very truly yours,
I. T. WILLIAMS & SONS.



CARS IN WRECK NEAR FORT WAYNE, IND., AUG. 13, 1911

The car on the right, No. 7971, is a wooden diner, and is undamaged. The badly damaged coach next to it is an all-steel Pullman. In this instance wood stood better than steel.

for berths in wooden cars, because they know that such are more comfortable.

Pinching cold and sweltering heat are not the only arguments against the metal car. It is stiff, unyielding and rides hard. It lacks the elasticity of wood. It jerks and jolts more. Technical men in the steel car business have published tables, diagrams and figures intended to demonstrate the elasticity of steel, for the purpose of creating sentiment in favor of the steel car. Maybe their figures are right, but they are so technical and are so overloaded with higher mathematics that the ordinary human being can get no meaning out of them. But the ordinary individual has no trouble in understanding that a steel car at high speed jerks, shakes, oscillates and quivers more than a wooden car and is harder on muscles as well as on the nerves. The tourist is deprived of much of the enjoyment of his trip, and the business man and the invalid lose their needed rest. In addition to these discomforts the steel car is noisy. A little time on the road is apt to loosen bolts, wear bars and beams till they rattle in the joints, and this adds annoyance which is absent from the wooden car.



STEEL SLEEPER RAMMED BY ENGINE

Metal plates and steel doors offered little protection here. This wreck occurred at Odessa, Minn., Dec. 18, 1911.

Most people are willing to sacrifice considerable comfort if safety is increased by doing so. The chief claim of the advocates of the steel car is that it is much safer than a car of wood. In fact, this is about the only claim put forward for it. Practically the whole argument is based on that proposition. It would be a very strong argument if it had facts to back it, for any device or appliance that will materially lessen danger in railroad travel will receive earnest consideration from the traveling public. Since this is the chief claim made by the steel car people, it is proper to examine it somewhat closely to see what merit it may have.

The principal sources of danger are collisions with other trains on the same track, or in leaving the track altogether. In the first instance the worst damage is done by telescoping—one car running into and through another and crushing the passengers within. The second danger comes when the cars go off the track at high rate of speed. Either accident is serious and is apt to cost the lives of passengers. No appliance has yet been devised to prevent such accidents altogether, and the question is, which car, the wooden or the steel, offers best protection to the passengers.

The first argument is that the metal car is less liable to catch fire than the wooden car. The conclusion in this instance is in favor of the metal car, but not as much in its favor as some suppose. Years ago fire was justly dreaded, because cars, if not heated with stoves were at least lighted with oil lamps, and in serious accidents the wreckage was liable to take fire. At present, however, no cars on trunk lines are heated with stoves or lighted with oil lamps. Heat is by steam from the locomotive and light by electricity, neither of which can start a fire in a wreck. Since the source of fire is almost wholly removed, the wooden car is in little more danger of burning than a metal car.

The evidence seems to be incontrovertible and almost undisputed that steel cars are harder to keep on the tracks than wooden cars. It is due to their greater weight and rigidity. They take curves less readily, and are harder to manage in negotiating crossings. Their very construction seems to render them more liable than wooden cars to go off the rails. Instances are not wanting where steel cars have left the tracks while wooden cars in the same train passed safely. The rigidity of the metal cars is believed to be responsible for their predisposition to leave the rails on curves and crossings, and doubtless their great weight is responsible for some of the trouble.

When a car at high speed is thrown from the track, it encounters conditions which test its strength in the severest manner possible.



WOODEN CARS REMAINED ON THE TRACK WHILE STEEL CARS W ENT OFF

The wreck shown in this picture occurred at Warriors Ridge, Pa., Feb. 16, 1912. The only wooden coaches in the train stuck to the track, while nine steel cars went into the ditch, costing five lives and the injury of many persons. The element of "greater safety" in the steel car is not apparent in this situation.

Builders do not specially provide for that emergency—when the accident comes the car must take care of itself. Here is where it might be supposed the steel car has all the advantage over wood—for some people suppose that steel will stand almost anything. So it will, if enough steel is used, but that is exactly the weak point in a metal car. Under blow, twist, strain and concussion metal may fail where wood will stand. Steel is nine or ten times as heavy as wood, and the car is only about twenty per cent heavier. Therefore, the steel shell, bars and beams of which the car is made are only about one-eighth or one-ninth as thick as corresponding parts in the wooden car, and when the impact comes, the metal may fail sooner than the wood. Experience in wrecks shows that such is often the case. Wooden cars have stood where steel has crumpled.

This experience is not confined to cars. Frames of aeroplanes are always of wood, because, weight for weight, wood is stronger than steel, particularly when wood's elasticity is taken into account. The same is true in making some types of folding canvas boats. The frames are of wood, because, weight for weight, it will stand more than steel. Shuttles used by weavers prove the same thing. The world is being searched for shuttlewoods, while steel is cheap and plentiful. Steel has been tried, but if thin enough to bring it within the requisite weight limit, it buckles under the blows of the pickersticks; but wood stands. It is the same with cars. Enough steel could be put in the construction of cars to make them strong enough to stand wrecks, but they would be too heavy to haul. As it is now, a serious complaint against them is their weight. They are now too heavy and yet have not enough metal in their construction to make them as strong as wood in resisting shocks and twists.

A study of some of the accompanying illustrations will clearly bring out the point that steel cars, under certain kinds of impact, will not resist like wood. Most of these illustrations have appeared in HARDWOOD RECORD before. They were clinchers in a series of articles which appeared in these columns last year and the year before, when the steel car interests were attacking the wooden car. Now that the same attack is on again, and the steel car is being pushed forward to a position which it has not yet qualified to fill, the same pictures strike straight to the point, and fitly illustrate additional evidence that the metal car must serve on probation a while longer before it can take the place of the tried and proved wooden car.

Increased safety is the most persistent claim made for the metal car. It has been shown that greater safety has not been demonstrated for it in the ordinary wreck when it leaves the track and goes over an embankment. There is another kind of accident, and most dreaded of all; it is the collision when two trains meet on the same track, or one train runs into the rear of another. It is then that the deadly telescoping occurs. The impact drives one car into and through another. The most appalling fatalities occur in accidents of that character.

It is to the point to inquire into the behavior of the steel car in such an accident. It has been shown again and again that it is as liable to be telescoped as the wooden car. It is no safer, and some believe that it is not as safe.



ONE STEEL CAR TELESCOPED ANOTHER

This picture is another view of the wreck at Odessa, Minn. A sleeping car tore one-third of the way through a diner, and eleven persons were killed.

When one car telescopes or runs through or partly through another, the process is simple. The platform of one strikes over the platform of the other, and as it is rammed forward by the impact, it cuts like a huge knife the superstructure of the overridden car. Telescoping seldom or never occurs unless the platform and bottom framework of one car slides over another. In such a case it is the car that happens to get on top that runs through the other. It is the bottom that does the cutting and tearing. If the bottom beams and platform of a wooden car mount over those of a metal car the latter car will be crushed, but if the steel car gets on top, it will telescope the wooden car. It all depends on which car strikes the other one at a disadvantage. It makes little difference what the superstructure is made of; it will crush like eggshell if the platform and heavy beams of another car



HOW WOODEN CARS STAND THE TEST

The wreck shown in this picture occurred near Milwaukee, March 12, 1913. It was a mixed train. The first steel coach went off and took the other cars with it. The cars shown in the cut are of wood.

strike it with the tremendous force due to collision. The platforms and bottoms must stand the impact; the superstructure cannot do it, no matter whether it is of wood or steel. Therefore, the steel car has no advantage over the wooden, as far as telescoping is concerned, provided both have the same style of platform and bottom.

This is an important point. The strength is in the lower parts, the floor and the beams below it, and these can be made in exactly the same way for both styles of cars. That is, the car with wooden superstructure can be made as strong as that which is of all steel material. The advantages which wood gives need not be sacrificed in order to obtain all the advantages which are to be had from steel underframes.

Competent car builders have recommended a compromise car, which will have the good qualities of both wood and steel. The underframe should be of steel, the upper parts of wood. The shock in case of collision will be sustained by the lower frame; the comfort of the wooden car will be secured by the superstructure. Weight will be reduced; elasticity and resiliency attained, and all the advantages of the wooden car will be combined with whatever strength the steel underframe possesses.

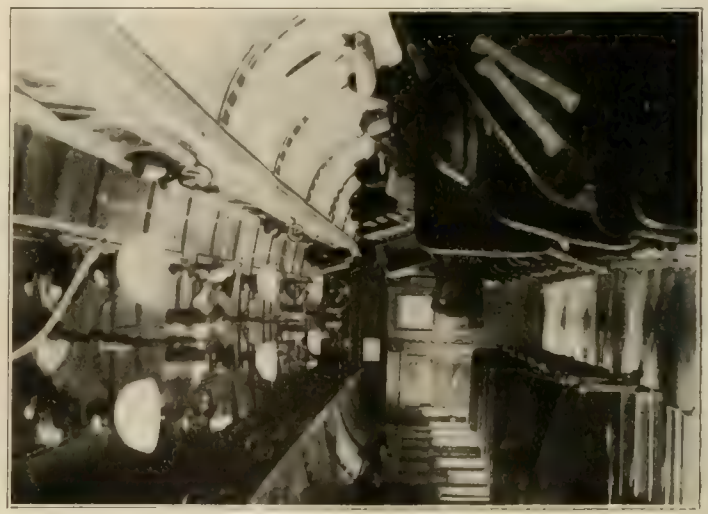
It is a mistake to conclude that the campaign in favor of the steel cars is being pushed by the railroads. Some of them may stand in because of their connection with steel interests or for other particular reasons, but if the railroads of the whole country were asked to vote on the question, the decision would doubtless be against a sudden or forced change from wood to steel. Most roads are willing to move slowly, try out the metal cars more fully, and finally adopt the car that is found best. That is a very different thing from a change ordered by Congress and enforced by law under penalties. Railroads have been experimenting. They are wide awake to the necessity of putting on the best possible rolling stock, and there is no question but that they will do it as soon as it is proved what is the best; but the steel car is yet in the experimental stage and the experiments thus far have not been all favorable—in fact, most of them have fallen short of expectations.

A change ordered by law under these circumstances would be unfair and unjust to the railroads and without due consideration of the public's comfort and safety. The change is premature; the steel car has not yet made good. It may be further developed and finally make good.

If neither the railroads nor the traveling public are pushing it, who is? It seems to be the work of the great steel corporations which have products to sell. They are forever on the watch for markets, and the enormous car-building industry of the country is a promising field. If the wooden car can be displaced by law on all railroads doing interstate business, and the steel car put in its stead, it means a market for additional hundreds of thousands of tons of steel every year. It is a game worth playing, and the indications are that it is being skillfully played. The steel interests own large blocks of stock in car works, and they are understood to be largely interested in some of the railroads. If they can get the wooden car outlawed they can exclaim with great truth as well as with appropriate stage effect: "The world is mine!"

They are not consulting the public which must use the cars; and they are not consulting the railroads which must buy them. The game is to compel the railroads to purchase full equipments of steel cars, in spite of doubt as to their efficiency; and to compel the traveling public to ride in the cars, in spite of positive knowledge that they are more uncomfortable than wooden cars, and strong suspicion that they are more dangerous.

It would cost railroads a great deal of money to make the change. Steel cars cost more than wood at the start; they are heavier and the expense of hauling them is greater; they are harder on the tracks and expense of road repair is greater; it is believed that their period of service will fall much under that of wooden cars, and they will reach the scrap heap sooner. The change would severely tax the resources of most roads. And after all this, the traveling public would be no better off, probably worse off; the railroads would be no better



INTERIOR OF AN OLD WOODEN SMOKER

This car was in the Milwaukee wreck and is shown lying on its side, little worse for the experience. The lamp fixtures are unbroken.

equipped, and the only gain that can be figured out would find its way to the pockets of the steel manufacturers.

Does the end justify the means? Should vast sums be taken from transportation companies to increase the profits of steel corporations? Should the public give up the comfortable and beautiful wooden cars that have served long and well, and ride in rigid, unattractive, too-cold or too-hot steel cars, which have served neither long nor very well?—and do this in order that the corporations which manufacture the steel may increase their dividends?

In its issue of December 25, 1911, HARDWOOD RECORD summed up the shortcomings of the steel car in seven short paragraphs, and every

charge against it is as true today as it was then and some of them might be expressed in much stronger language. The seven items of the indictment follow:

"First: That in collisions steel cars are not immune from telescoping and consequent loss of life of their occupants.

"Second: That in derailment steel cars are just as prone to collapse as wooden cars on steel underframes.

"Third: That cost of steel car equipment is largely in excess of wooden car equipment, without any compensating value.

"Fourth: That the hauling of solid steel passenger trains is very expensive and extravagant, constituting an absolute waste of money.

"Fifth: That solid steel passenger trains of even a moderate number of cars are so heavy as to require two locomotives, one of which could haul a wooden train of the same number of cars, which adds in no inconsiderable degree to the dangers incurred.

"Sixth: That steel passenger coaches have demonstrated their inability to take crossovers and switches with safety when running at even moderate speed.

"Seventh: That the steel car is rarely comfortable to the occupants in winter and is a veritable hotbox in warm weather, and that by reason of its reverberation of metal, loose joints and bolts it is a nerve-racking vehicle in which to ride."



Conditions in Michigan Excellent



Editor's Note

The following article is the report of Chairman Bruce Odell of the market conditions committee of the Michigan Hardwood Manufacturers' Association, which held its seventh annual meeting at Detroit, Mich., on Tuesday, July 22. The report contains mighty gratifying statements and figures from the viewpoint of the hardwood lumbermen, and should be read by every hardwood manufacturer and wholesaler in the country.

It is with no little pride and pleasure that your committee on market conditions submits this, its seventh annual report. With all of the members of this committee, I feel with pride that we have been able to serve you well; that you have had confidence in the sincerity of the committee's reports; that you have used these reports somewhat as a guide to manufacturing and marketing your products, and that our seven years of experience have demonstrated that these reports are a safe guide to the manufacturing and marketing of northern hardwood lumber. Some of the members are especially proud of the fact that they have served on the committee continuously during the past seven years, participated in the preparation of each and every report of the committee, and still enjoy your confidence and support.

It is a particular pleasure to be able to report such favorable conditions at this time, not only on all kinds of hardwood lumber, but on hemlock lumber also. From the standpoint of stock conditions, they were never more favorable to the lumber producers of Michigan than at present. The stock of hardwood at the mills is less than it has been since 1909 and only about 88 per cent of what it was a year ago. At no time during the past four years has there been a surplus stock in the hands of our producers. In fact, at any time for several years when there have been good trade conditions, a decided shortage has soon developed and prices materially advanced. Under favorable trade conditions during the next year we would see the greatest shortage of northern hardwood lumber that we have ever seen, and even under very unfavorable trade conditions during the next year we do not believe any material surplus would develop.

The general stock conditions of the combined hardwoods is practically true of each of the different kinds of hardwood lumber, there being no accumulation of any one item. The total stock of maple lumber is but eighty-nine per cent of the stock of a year ago, and the stock remaining unsold is less than twenty-five per cent of what it was July 1, 1912. As a large proportion of the maple lumber produced is used in the manufacture of maple flooring, it may not be amiss to compare present conditions in that respect with the conditions of a year ago. The bulk of the maple used for this purpose is 4/4 in the grades listed as No. 1 common, No. 2 common, No. 1 and 2 common and No. 2 common and better.

1913 shows: Total stock, 88,904,000; sold, 86,531,000. 1912 showed: Total stock, 108,452,000; sold, 100,311,000 or 20,000,000 less stock this year than last and practically all of it sold. Surely the maple flooring manufacturer should not complain of a fair price for maple lumber under these conditions.

Comparing some of the other woods, this year with last, the stock at the mills and the amount unsold, we find the following, viz.: Ash, less than 60 per cent as much stock and less than 50 per cent as much unsold. Basswood, 93 per cent as much stock and 60 per cent as much unsold. Beech, 76 per cent as much stock and 65 per cent as much unsold. Elm, 86 per cent as much stock and 66 per cent as much unsold. Birch shows a very slight increase both in stock and amount unsold, there being an increase of 7 per cent in amount of stock, but Michigan is a small factor in the production of birch lumber as compared with Wisconsin, and the combined stocks of the two states may show a reversal of form. The entire stock of birch in Michigan is 16,000,000 this year as against 15,000,000 last year.

The proportion of stock at the mills and yards of the producers of lumber that is covered by orders has always been considered to indicate fully as much regarding real market conditions as the total amount of stock on hand. If this holds good for 1913, we are in a very favorable position indeed. Our stock reports show that our members have orders for 85 per cent as much as total stocks on hand. This same comparison for a series of years shows the proportion of the total stock covered by orders as follows: viz., 1913, eighty-five per cent; 1912, seventy-nine per cent; 1911, seventy per cent; 1910, sixty-five per cent; 1909, fifty-six per cent. Refresh your memories as to the market conditions for the years named and you will find that they were approximately reflected in the proportion of the stock sold. With only fifteen per cent of stock on hand to market, the producers of northern hardwood lumber in Michigan can afford to make haste slowly and get what their product is worth.

We have always had so much to say regarding No. 3 common or low-grade hardwood lumber, that if we passed it this time without saying something about it, some might look upon our omission with suspicion. We have said before that No. 3 common is "like the poor—always with us," also that "the smaller he is, the better he looks to us." From this standpoint, our poor relations have been real prosperous during the past year, thank you, and No. 3 common is small enough to look quite attractive to us.

The stock of No. 3 common at the mills is less than it has been at any time in the past six years, being only 60 per cent of what it was in 1910, and comparing the proportion of stock sold, conditions could not be much more favorable, there being orders for nearly 90 per cent of the entire stock on hand as against 70 per cent for 1912, less than 50 per cent for 1911, about 46 per cent for 1910, and 40 per cent for 1909. More evidence that the proportion of stock sold indicates market conditions. Compare the price paid for No. 3 common when only 40 per cent of the stock was sold, with prices when 90 per cent of it is under contract.

Notwithstanding the excellent condition of the market for

No. 3 common hardwood, the production and marketing of low-grade hardwood should be watched closely, as it will be the first item to respond to adverse conditions. We should continue to encourage its use where it has not been used before. The use of northern hardwood ties has greatly curtailed the production of low-grade hardwood lumber. There is no probability of an over-production of ties of this kind and we should encourage their use.

There is a prevalent opinion that the small amount of hardwood lumber available will be required to meet even a very light demand, and while your committee does not consider material advances in prices advisable at this time, it is very decidedly of the opinion that the market is strong at the recommendations of the April meeting.

HEMLOCK

In our opinion, some of the producers have not shown the strength in the hemlock market that stock conditions warrant. A review of our reports shows a constant decrease in amount of stock since 1910, there being less than half as much now as then. The hemlock stocks for the different years show as follows:

July 1, 1910	193,000,000
July 1, 1911	162,000,000
July 1, 1912	113,000,000
July 1, 1913	90,000,000

With the above showing and the estimated cut for 1913 being 14,000,000 less than for 1912, surely there should be no weakness shown. Having reduced our stock 103,000,000 or more than half in the past three years, and having reduced it 37,000,000 in the past year, 23,000,000 in stock, and 14,000,000 in cut, why should there not be an element of strength in the hemlock market, even if large quantities of yellow pine are coming north? With all the yellow pine that may be moved into the North, there will still be a demand for the small amount of hemlock that we will have to furnish.

There is a good movement of hemlock now and practically all carload orders are for quick shipment, indicating that dealers are carrying small stocks and buying only to meet their immediate requirements. With the territory that gives hemlock preference over yellow pine and the business that is wanted for quick shipment, there should be a good demand for all the available hemlock stocks.

In the hemlock market, however, there is a lack of the speculative feature at this time, and rail shippers seem to be favored on account of being able to meet the immediate requirements feature of the market. If this condition continues throughout the season, the stock for water shipment may meet with slow sale until rail stocks are exhausted.

While the movement of hemlock may seem slow to some producers, they must take into consideration the amount of stock on hand and that it is not possible to ship as much from a 90,000,000 stock as from a 190,000,000 stock. Crops are good throughout the country, and especially so in the hemlock consuming district. A severe car shortage seems imminent and unavoidable. We venture the opinion that whoever can furnish hemlock lumber promptly after September 1 will be in position to command a good price for it.

Hemlock lath occupies a strong position, the total stock being about 13,000,000 as against about 27,000,000 three years ago, and about 15,000,000 one year ago. Prices are ruling firm at about the top figure.

Wisconsin Manufacturers Meet

The mid-summer meeting of the Northern Hemlock and Hardwood Manufacturers' Association held in Green Bay, Wis., July 23, brought out perhaps the largest attendance of any session in recent years. The sessions were held on the shores of Green bay, on the veranda of the Bay View Beach resort.

The address of President Edward H. Hamar, which opened the meeting, follows:

President's Address

Since our last quarterly meeting much history has been made in association work. There have been held two association meetings, one in Kansas City and one in Chicago, each of which accomplished work that will be of lasting benefit to the lumber manufacturers. I had the pleasure of attending both of these meetings and was very much impressed with their efficient work. The National Lumber Manufacturers' Association meeting, held in Kansas City, adopted a number of very important resolutions, among them one endorsing the forest products exposition and authorizing the board of governors to devise means for financing and carrying on that part of the work. A committee was immediately appointed by the president, and action on the proposition was so rapid that the capital stock of $25,000 has already been underwritten by seven members of the association. It is to the credit of the National that it has listed among its members men liberal and broad enough to see and realize the tremendous possibilities of an advertising scheme of this kind. The forest products exposition, which was first endorsed by this association, is now an assured fact.

Another resolution that was adopted by this association was one authorizing the board of governors to devise means for organizing or taking over one of the now existing inter-insurance companies. I believe that the National is working along the right line in fathering this inter-insurance scheme. It is only eighteen months ago that we of our own association were trying to devise some plan for organizing a company of this kind, but were forced to abandon the plan on account of limited membership.

The National Hardwood Lumber Association meeting held in Chicago was quite as important as the Kansas City meeting. At this meeting new grading rules were adopted which we believe more nearly conform to the present methods of grading lumber. The manufacturers who attended this meeting came away feeling well satisfied with the work accomplished, and convinced that they had been fairly treated. A great many of us feel that even the new rules are not exactly what are needed, but as they are a great improvement on the old ones, we should be satisfied to let the matter rest for some time.

A few days ago there convened in Chicago a representative body of about one hundred of the leading manufacturers from all parts of the United States. If anyone wishes to know what is the matter with the lumber business, he has only to read the report of that meeting. The manufacturers of substitutes are spending the enormous sum of six and one-half million dollars annually in advertising, while the manufacturers of wood, outside of a very few, are spending nothing.

Hemlock has received some hard knocks recently through the press. Whether or not these derogatory press items have been published through the influence of the press bureaus of the manufacturers of substitutes, or of other associations in carrying on their advertising campaigns, I do not know. I am a great believer in competitive advertising. I believe that the more associations advertise the woods which they represent, the more trade will be stimulated; but I do not believe that any wood should be advertised at the expense of another. All of the different associations should join hands to make the advertising campaigns carried on by them clean ones. One of the best methods of advertising that can be adopted by any association is an exhibit at the forest products exposition, and I recommend that action be taken by this association to formulate a plan to have the woods that it stands for represented.

Just now we are hearing a great deal about community building. This is a work in which every lumberman should be interested. He should do his share towards the upbuilding of his district by joining in on any proposition that will tend to increase its growth. One of the best methods of community building and one that will increase building and the sale of lumber is through the organization of building and loan associations. A progressive and honestly managed building and loan association is one of the best assets which any community can have. It is the key with which every wage earner may have a certainty of unlocking the door of success. Through it he may finally pay for his home and by economy and care rear and properly educate his children and lead them an example of a correct and successful life.

We have a number of problems to face to which very careful thought must be given during the next few years. First and foremost among these problems is that of labor. There is no denying the fact that there is a growing unrest in labor circles. Especially is this true of common labor. From my observations I am of the opinion that there are sufficient men in the country to perform the work there is to do, but in trying to better their condition they have become restless to such an extent that their labor is becoming inefficient. The laborer works a few

days at one place and, even before becoming familiar with the work, quits and moves on, thereby causing a tremendous waste of time. I would venture to say that at the present time he is losing at least thirty per cent of his rightful wages by lost time, caused by the present unrest, and the employer is losing a like amount in inefficient work and money. Taking advantage of these conditions, an organization purporting to represent the laboring men has made a very rapid growth. The employers read of the disturbances in some other portion of the country, some outbreak of lawlessness and crime, some violation of the law, and they say, "Something ought to be done"; but they do not realize that their own community, perhaps their own business, may be the victim of the next wave of anarchy. This move is practically a new one and has not gained much of a foothold except in isolated places, but wherever it has entered into the field it has been followed by serious labor troubles, resulting always in outrageous acts of violence and in bloodshed. No one can close his eyes to the real danger in allowing such an organization to gain a foothold which has been gained by this one. Every employer should give his hearty support to any effort directed against the organization. Every employer should make a special study of labor conditions in his operations and in his immediately vicinity. He should meet his men half-way and treat them fairly and squarely. I am not so sure but that we employers are partly to blame for the present conditions. In my own experience I have known of instances where men have been forced to strike in order to get an increase of ten cents a day in wages, causing a monetary loss to both employer and employe far greater than the amount asked. Had demands of this character been met and handled properly we would not be facing present conditions.

Another problem before us is the employers' liability law. These laws are an outgrowth of our former method of handling injured employes. It is not so many years ago that if any employe lost a finger or a hand at nine o'clock in the morning his pay ceased at that time. The employe, deeming himself mistreated, and rightfully so, sought redress through the lawyer. The lawyer recovered damages for his client through the court, retaining half for his fees. The employer to protect himself took out liability insurance. The liability insurance companies to protect themselves and pay dividends to their stockholders paid no claims without contesting. Still the lawyer had to be employed to recover damages for the injured employe. We now have liability laws—good, bad, and indifferent. The poor ones will eventually be amended and straightened out so that the employer and employe will get a square deal and each will be satisfied. Working conditions will be better, and the employe, knowing that he will be protected and taken care of in case of injury, will be better satisfied and will be a more competent workman.

Secretary R. S. Kellogg then delivered his regular address. He stated that the finances of the association are in most excellent shape. According to the report, there are eighty-two members in good standing at the present date and a larger proportion of the membership than ever before consists of up-to-date, progressive firms and also that the total manufacturing capacity is greater than at such previous times when a larger number of names was carried on the membership roll.

After touching on details as to inspection service and office work and also thanking the members for their prompt manner of handling reports of cut and shipments, the report went into a detailed resumé of statistics for the past six months. The report shows that an average of more than seventy monthly reports during the last twelve months show twenty-four per cent more hemlock shipped than sawed, and four per cent more hardwoods, making a net increase of shipments over cut of fifteen per cent since July 1, 1912. For the first six months of 1913 compared with the first six months of 1912, there was a decrease in hemlock cut of five per cent and in hemlock shipments of seventeen per cent, an increase in hardwood cut of twelve per cent and a decrease of hardwood shipments of seven per cent, making an increase of total cut of three per cent and a decrease in total shipments of thirteen per cent. The report states, however, that the decrease in shipments was much less than should have been expected when it is remembered that the members began the year 1913 with thirty-five per cent less stock on hand than in January, 1912.

Reports from the same forty-six firms show a decrease of eighteen per cent in total hemlock stocks and six per cent in total hardwood stocks on hand from July 1, 1912, to July 1, 1913. This is a combined decrease of thirteen per cent. In hardwood stocks on hand unsold, according to the report, there are decreases of eighteen per cent in ash, thirty-six per cent in basswood, forty-one per cent in rock elm, seventy-one per cent in soft elm, twenty per cent in hard maple, seven per cent soft maple, and thirteen per cent oak. The only increase was in birch, for which the market is still very strong.

The report states that these figures coincide very closely with the reports submitted to the Michigan Hardwood Manufacturers' Association at Detroit. This part of the report closes with the statement that statistically the position of northern hemlock and hardwoods was never stronger.

The report then reviewed the fibre versus wooden box container case to date and then entered into a description of the tests for paving blocks of hemlock and northern hardwoods. It brought to mind the fact that in 1906 the association supplied a considerable amount of hemlock and northern hardwoods for experimental wood block pavement in Minneapolis. The experiment was arranged by the United States Forest Service. The official inspection was made a short time ago and it was found that the hemlock stood up pretty well and that the white birch presented a splendid appearance. There is much reason, according to the report, to believe that experiments will develop a considerable opportunity for the utilization of certain grades of northern hardwoods for paving blocks.

The report touched on the work of the advertising committee, reviewed more closely elsewhere in this report. It referred to the recent meetings of the National Lumber Manufacturers' Association at Kansas City and of the National Hardwood Lumber Association at Chicago. Regarding the former association, the report said that the Northern Hemlock and Hardwood association was the first to endorse the plan for holding a national forest products exposition and that it should immediately begin making plans for its share of the exhibit.

The report then reviewed the work of the railroad committee since the last meeting. It also discussed the plan of issuance of f. o. b. mill prices of lumber by the Forest Service.

The report closed with the resume of general conditions, which was optimistic in tone and stated that recent reports indicate a fairly healthy condition in general and that there is much reason to think that a wise conservation at present in the marketing of lumber will bring its reward later in the year.

The financial report was more satisfactory than for some time, Mr. Foster having a balance on hand on July 21 of $2,226.09. The summary of the report follows:

Balance on hand, last report April 19, 1913	$3,304.71
Received from secretary	4,191.87
	$7,496.58
Total vouchers paid	5,270.49
Balance, July 21	$2,226.09

M. J. Quinlan of Green Bay, in his report as chairman of the bureau of standardization and grades, stated that hemlock is still selling readily at $1 off the February list. The committee recommended that members report quarterly on the quantity of the various thicknesses in the different grades, if possible; if not, the quantities of the different thicknesses in log run. To standardize sizes, the committee recommended that 6-inch be worked to 5¼ inches; 8-inch to 7¼ inches; 10-inch to 9¼ inches and 12-inch to 11¼ inches, with a uniform thickness of $\frac{1}{8}$ of an inch. It was also recommended that no change be made in the sizing of hemlock piece stuff.

The question of increasing the force of inspectors from two to three men was brought up, but after a lengthy discussion it was taken as the sense of the meeting that because of the expense no additions be made at this time. The two inspectors, W. H. McDonald and R. G. Ball, made 296 calls during the first half of 1913, as compared with 284 calls in the corresponding period of 1912.

The bureau of grades will make a full report at the October meeting on standardization of grades, including merchantable hemlock, concerning which there is some question.

"Getting the Trade of the Retailer" was the subject of an interesting discussion by F. C. Ross of Kansas City. Mr. Ross urged plenty of advertising, but at the same time suggested that to get the benefit of advertising the "copy" be changed frequently so as to attract the most attention possible.

At noon the Green Bay hosts tendered a luncheon to the visitors.

At the beginning of the afternoon session George H. Holt of Chicago expounded on "Inter-Insurance."

M. P. McCullough, chairman of the advertising committee, then reported for that body, stating that it had received approximately 1,250 replies since October 1 on the birch advertisements. In addition to this, the secretary recently addressed personal letters to four hundred of the leading architects in the country and fifty per cent replied, requesting the birch book and samples of birch wood with different finishes. The report stated that the high price of mahogany will unquestionably open up a broader field and result in better prices for birch.

The report said that a paper published at a town in Illinois recently carried an unsolicited article on birch finish, the bulk of it being taken from the birch booklet. It was urged upon the members that they do their part toward endeavoring to secure similar write-ups in their local press.

On hemlock the advertising was discontinued during the farmers' busy season in the summer time, but it is planned to resume again in October. The recent hemlock advertising brought a hundred replies per month to the date the ads were discontinued.

W. A. Holt made the report of the legislative committee, saying aptly in his introduction that "as the Wisconsin legislature was still in session, it is not known at this time how much damage that body will do before it adjourns."

J. E. Rhodes, secretary and manager of the National Lumber Manufacturers' Association, made probably the most interesting and instructive address of the convention. He discussed the coming forest products exposition which will be given under auspices of the association during the coming winter at Chicago and New York, and possibly at Philadelphia and Cleveland. As the result of his talk, the Northern Hemlock and Hardwood Manufacturers' Association voted unanimously to make an exhibit as an association, and delegated the board of directors to make all arrangements. The general campaign against the manufacturers of substitutes for wood was put up to the association in a strong manner by Mr. Rhodes, and it was generally agreed that the forest products exposition will go a long way toward combatting the efforts of the aggressive makers of substitutes for wood. The situation at Birmingham and other southern cities which have legislated against the use of wooden shingles was held up as a striking example of the length at which the substitute makers have arrived in their efforts to displace and supplant lumber.

Mr. Rhodes also explained the developments in his association's crusade against the fiber box people before the Interstate Commerce Commission. He expressed confidence that the commission will order a restriction upon fiber containers so that packages of not more than thirty pounds may be shipped in fiber containers.

The standardization of wooden boxes, to which end the National association is now working, will be an early result of the present litigation before the Interstate Commerce Commission, Mr. Rhodes said.

At the conclusion of Mr. Rhodes' address, a motion was passed authorizing the board of directors to make all arrangements for the association's exhibit at the forest products exposition. In line with suggestions made by Mr. Holt in his address on insurance, and the report of the National association's work in the same direction, a motion was passed authorizing the president to appoint a committee of five members to make a full investigation of the subject of insurance, including workmen's compensation or industrial insurance as well as fire indemnity. The committee will pursue its investigations along the same lines as the National Lumber Manufacturers' Association committee is now working.

W. C. Landon, Wausau, reported on the recent convention of the National Lumber Manufacturers' Association, and the convention closed after a rising vote of thanks was tendered to the hosts of the Green Bay meeting, who are: Diamond Lumber Company, Northland Lumber Company, Menominee Bay Shore Lumber Company and Enos Colburn, wholesale lumber, all of Green Bay. As representative of the Green Bay Commercial Club, J. H. Elmore gave a short talk of welcome and his remarks were supplemented by E. S. Hall, secretary of the organization.

Eau Claire was chosen as the place for the next meeting, to be held in October.

On Wednesday evening the visitors were treated to a three-hour boat ride on Green bay and the beautiful Fox river.

Baltimore Exports Favorable

The statistics of exports of lumber and logs from the port of Baltimore for the six months of the current calendar year have been completed, and they present an impressive showing. It appears from them that in most of the export items there has been a marked increase of movement, the recessions being the exception and cutting no important figure alongside of the gains. Whether the rate of increase will be maintained during the next six months remains to be seen. Figures for June indicate that a slump may develop, since the totals for the sixth month are much below those for the corresponding month of 1912. This is the case with respect to logs as well as lumber, although the fact must also be taken into account that the totals for the various months vary greatly, and that a lean month may be followed by a fat one, and *vice versa*. Still, in view of the reports received from the other side, about heavy accumulations of oak planks and some other woods, it would not be at all surprising if the next few months showed the effect of congestion and low prices abroad, and if these factors were reflected not only in the woods which have gone forward in excessive quantities but in the entire list, the foreign market being now in a condition where liberal offerings in one item are having a bearish effect upon most others. The results of the attractive prices realized last winter are seen in the great gains in exports during the early months of the year over the corresponding months of 1912, and which gains were so large that the totals for the six months are much ahead of the first half of last year. The figures for the period—the six months of 1913—as compared with those for the same time of 1912, are as follows:

EXPORTS OF LOGS

	Hickory				Oak				Walnut				All others	
	1913		1912		1913		1912		1913		1912		1913.	1912.
	Feet.	Value.	Feet.	Value.	Feet.	Value.	Feet.	Value.	Feet.	Value.	Feet.	Value.	Value.	Value.
January	169,000	$ 5,641	35,000	$ 887	45,000	$2,294	47,000	$1,140	138,000	$ 11,828	90,000	$10,910	$ 2,710	$ 5,202
February	190,000	5,949	48,000	1,230	4,000	100	19,000	483	166,000	12,836	207,000	16,406	1,240	490
March	275,000	8,585	147,000	3,687	39,000	1,365	17,000	415	184,000	11,660	152,000	13,534	1,625	1,925
April	129,000	4,324	24,000	600	59,000	1,925	.....	.....	274,000	16,354	106,000	5,500	3,765	20
May	153,000	4,900	151,000	3,421	10,000	300	23,000	570	526,000	32,890	115,000	6,232	660	2,435
June	65,000	2,150	366,000	9,510	20,000	700	32,000	790	275,000	16,767	351,000	24,278	2,480	429
Total	981,000	$31,549	771,000	$19,335	177,000	$6,684	136,000	$3,398	1,563,000	$102,335	1,021,000	$76,860	$12,480	$10,501

EXPORTS OF HARDWOOD LUMBER

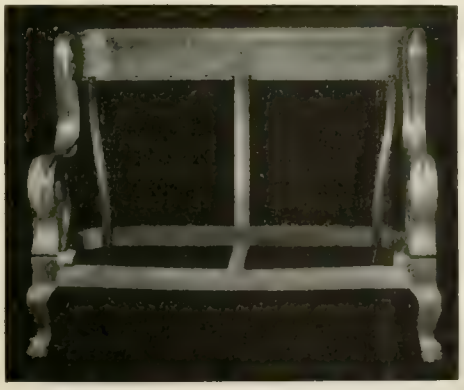
	Oak				Poplar				All others			
	1913		1912		1913		1912		1913		1912	
	Feet.	Value.	Feet.	Value.	Feet.	Value.	Feet.	Value.	Feet.	Value.	Feet.	Value.
January	3,573,000	$122,043	2,467,000	$ 80,145	303,000	$11,851	358,000	$13,772	327,000	$ 13,473	228,000	$ 9,505
February	2,445,000	82,723	2,100,000	70,444	205,000	7,526	122,000	4,770	257,000	10,840	180,000	8,453
March	2,174,000	68,010	2,320,000	77,082	279,000	10,004	190,000	8,056	472,000	21,870	234,000	10,336
April	1,784,000	58,561	1,111,000	35,512	164,000	7,922	51,000	1,710	345,000	16,511	70,000	3,702
May	2,734,000	87,820	2,400,000	80,652	373,000	17,471	123,000	6,526	516,000	26,592	120,000	4,761
June	2,099,000	75,829	2,700,000	100,074	182,000	6,323	295,000	16,952	655,000	33,256	306,000	13,538
Total	14,799,000	$494,986	13,094,000	$443,909	1,506,000	$61,097	1,139,000	$51,786	2,632,000	$122,542	1,130,000	$50,291

Parlor Furniture Frames



MODERN HIGH GRADE PARLOR CHAIR

Furniture may be divided into several classes, based on differences in style, use, material, and finish. It would not be easy to separate all furniture into the various classes to which it belongs, for there are many special kinds and odd pieces; but there are several well-definied classes. Among these are the following: Filing cabinets and devices; office desks of numerous patterns; tables of many kinds; chairs of so many shapes, sizes, and uses that a mere list would be voluminous; bedroom suites; church furniture which is so different from other kinds that it would be out of place anywhere else; lodge furniture which includes many odd and special designs; furniture for school rooms, consisting principally of desks; theater and hall furniture, the most important articles of which consist of fixed chairs, sometimes supplied with footrests; furniture for the kitchen and pantry, which is often simple in design, plain in finish, and of medium-priced woods; and parlor furniture of numerous patterns and designs.



FRAME OF UP-TO-DATE PARLOR SETTEE

Parlor furniture is generally upholstered; but the simple fact that it is upholstered does not place it in the parlor furniture class, because other kinds of furniture are often so finished. The upholstered furniture generally passes through two factories. One makes the frames, the other puts on the cushions and other finish. The making of the frames is a distinct occupation. Some factories do nothing else, while others make the woodwork, finish it with oils, paints, and varnishes, and add the upholstering. The scope of the present article includes the woodwork only of what is commonly classed as parlor furniture. The articles are sometimes listed as "parlor frames." The woodworker only is concerned in their making.

Certain special features in the material must be looked after. The wood should be of kinds that season well and stand well after seasoning. While pieces of various dimensions are required, the prevailing sizes have considerable thickness in order to give strength to the frames which support the upholstering. Thin strips which yield under strain will not do. Few broad pieces or panels are employed, and a large part of the finished wood is exposed to view. Little veneer is required. These facts are taken into consideration when wood is selected for this class of furniture. It must polish nicely, because much of the furniture's value depends on the beauty of the wood.

If it is not thoroughly seasoned, the joints are liable to pull apart, though they may be fastened with dowels and glue. Seasoning is one of the most important matters in the process of manufacturing this class of furniture. The lumber arrives at the factory "shipping dry." This condition may be attained by long air seasoning at the mill yard where the lumber is sawed, or it may be hastened by steaming, or by the heat of the dry kiln, or two or more of the methods may be combined. No matter what processes have been employed in drying the lumber before it reaches the factory, the furniture maker takes no chances, and passes it through dry kilns of his own and satisfies himself that it is in proper condition.

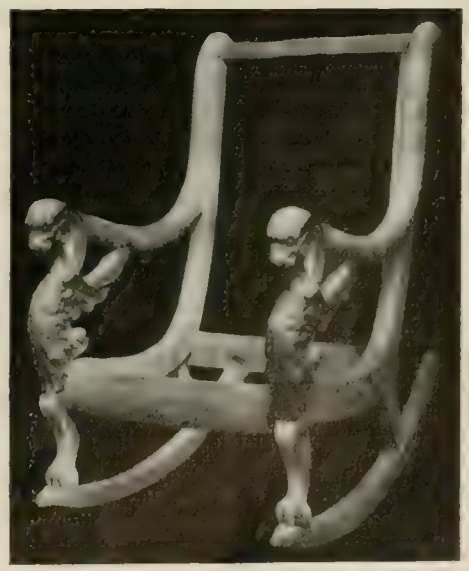
The usual articles classed as parlor furniture of this kind are couches, davenports, divans, lounges, sofas, settees, chairs, and in some instances folding beds.

The kinds of wood used fall short of the number employed in some other branches of furniture making, because many cheap and common sorts are not demanded, and the bulk is made up of a few high-grade kinds. General statistics of furniture manufacturing do not separate the woods which go into furniture of the various classes, and it is consequently impossible to give figures for the whole country, which will show the quantity of wood annually demanded by the makers of parlor frames. Such figures have been compiled for Illinois, and they give a basis for general estimates. Large amounts of this kind of furniture are made in the state, by twenty-three manufacturers engaged in the business, and their reports show that the annual quantity of wood consumed is nearly fourteen million feet, at a cost of $417,395, or an average cost of $29.74 per 1,000 feet. The table which follows gives the different kinds of woods and the amount of each.

YEARLY USE OF WOODS FOR PARLOR FURNITURE FRAMES IN ILLINOIS IN 1909

Wood	*Quantity*
Birch	6,138,000
Maple	3,787,000
White oak	1,257,000
Beech	750,000
Red oak	357,000
Elm	353,000
Mahogany	333,000
Red gum	306,000
Shortleaf	215,000
Ash	105,000
Chestnut oak	90,000
Chestnut	80,000
Yellow poplar	63,000
Basswood	41,000
Sycamore	40,000
White pine	25,000
Cottonwood	24,000
Red cedar	10,000
Total	13,974,000

Sixty-five per cent of the lumber represented in the foregoing table came from Michigan, Wisconsin, and Minnesota, sixteen per cent from the Ohio valley and farther south, five and a half per cent from foreign countries (considerable of it being maple from Canada) and the remainder from various parts of the United States; but not one foot from the Pacific coast. This fact is remarkable, because lumber from Washington, Oregon, and California is winning its way quite rapidly in the manufacturing centers of the eastern half of the



HANDSOMELY CARVED PARLOR ROCKER

United States. The explanation of the absence of Pacific coast woods from the parlor furniture industry in Illinois is that very little softwood is used, and the Pacific coast is almost totally destitute of hardwoods. Three softwoods are listed in the table, shortleaf pine, white pine, and red cedar, the total quantity being 250,000 feet, or less than two per cent of all. The parlor furniture frame industry uses a smaller proportionate amount of softwoods than almost any other industry.

Three-fourths of all wood reported in Illinois in 1909 for parlor frames was birch and maple, both of which came almost wholly from the North. Later statistics have not been compiled, but some men well posted in the business are of the opinion that a somewhat rapid change is taking place in the kinds of wood used, and the region of supply. It is believed that gum is displacing birch. This is not because birch is liked any less than it was years ago, but because gum is cheaper, and manufacturers have learned how to use it with very satisfactory results. It is a handsome, substantial, reliable wood, when it is properly seasoned, and its use in this industry appears to be rapidly increasing. Manufacturers recognize two kinds of gum, red and sap. These are commercial distinctions, and have no botanical basis. Both kinds come from the same tree—the red gum. The sap gum is the light colored sapwood, and the red gum, as the lumberman speaks of it, is the heartwood of the same tree. Some trees are practically all sapwood, others are largely heartwood.

Birch is the leading wood, as shown in the table, and most of it comes from the North. Two or more kinds of birch figure in the total, the principal being sweet birch and yellow birch. The trees are easily distinguished in the woods, but the wood of both goes to factories together, and the users could hardly tell them apart if they would try.

The relatively small supply of wood drawn from the South by the parlor furniture industry, as shown in the foregoing table, is explained only by the fact that three woods largely used—maple, birch, and beech—are not extensively lumbered in the South. The table, however, which gives the figures, is three years old, and considerable change in sources of supply may have taken place since then. There is little doubt that the parlor furniture industry, at least in Illinois, draws more supplies from the South now than it did three years ago.

The makers of parlor furniture use some figured wood, but not as much as the makers of some other sorts of furniture, for the reason that the surfaces exposed to view are smaller and figures do not show to advantage. Fine color is more esteemed than the contrast which figure gives. Birch, maple, and gum take exquisite finish. They may be stained almost any desired color. These three woods may and often do pass for mahogany or cherry. The imitation may be so perfect that only those intimately acquainted with the woods and the ways of working them can tell the true from the imitation.

Parlor furniture affords the wood carver an opportunity to display his skill. Arms, feet, and backs of chairs and the different styles of davenports and settees are decorated with lion heads, eagle feet, and busts, gorgons, and gargoyles. The carving must be done on solid wood, for veneered pieces would be out of the question.

The makers of frames for parlor furniture face one of the problems which many other manufacturers of articles of wood have faced—that of waste. They make use of many sizes. Lumber is ripped and crosscut to produce the desired dimensions, and when lumber of proper specifications is procured, the waste is not great; but this is not always the case. Cuttings often do not come out exactly even, and odds and ends will be left over. These may be too short or of the wrong shape, and their destination is the boiler room where they have fuel value only.

The waste is increased for every defect that must be cut out. Some manufacturers who use many small pieces have tried cutting stock from low-grade stuff. They buy lumber of that kind cheaply, but the waste is more, and it is questionable whether they can save anything by working up low-grade stuff. They must pay the same freight on poor lumber as on good, and by the time the greater waste is thrown away, the anticipated saving disappears.

Some manufacturers of parlor furniture frames have attempted to interest sawmills in getting out dimensions of exact sizes. The argument has been advanced that the sawmill could work up low-grade stock in this way, use what is good and throw away what is bad, and make a profit from a class of lumber which is poor sale through ordinary channels. By so doing, no freight is paid on worthless stuff—knots, defects, splits, wany pieces, etc.—for that is thrown away at the mill, and the serviceable parts are cut out and shipped.

It has been found that this suggested means of closer utilization looks better in theory than it works in practice. At first glance it seems that sawmills, by installing a little extra machinery, could cut perfect small dimension stock from low-grade lumber which in its usual form is hardly worth shipping. It has not turned out that way, however, in the majority of cases. Sawmills continue to ship lumber to the furniture factory in the old way, and the dimensions are cut there.

One reason why sawmills are unable to make anything by cutting small dimension stock, is that they must get out so many sizes and kinds to meet the requirements of different buyers. If they make only a few sizes, the market for those sizes is over-supplied; while if they produced many sizes, they must hunt for markets in many places, and the details of such a business make it impracticable. All sawmill men know that it would be easy to cut out quantities of small dimension stock of first class quality from odds, ends, and low-grade lumber; but it is quite another matter to sell the various sizes and kinds at a profit, because they must be shipped in so many directions in order that each particular kind will reach the buyer who wants it. This is one of the serious problems of forest conservation. There is a buyer for every scrap of wood, provided the scrap of wood and the buyer can be brought together; but that is the part of the problem which has not yet been worked out satisfactorily. The makers of parlor furniture frames have tried to find a solution for their part of the problem. They think that many of the small pieces which they use could be cut at the sawmills from low-grades and culls, at a profit to the lumberman and a saving to the furniture maker; but the combination for doing it has not yet been figured out—at least it has not been for several of the common kinds of lumber, though some headway has been made in that direction with oak, which reaches markets through more channels than some of the other woods.

Slow Burning Woods

All woods will burn if brought in contact with fire and kept there a sufficient length of time; but there is much difference in the inflammability of different woods. Some will take fire in situations where others will scarcely show signs of scorching. Three woods which have well-established reputations for being hard to set on fire are holly, redwood, and European alder. California redwood will scorch and char to a considerable extent before it will burst into flame. Firemen in western towns where redwood is much used in building houses know how much easier is the work of controlling a fire where this wood is concerned than where the material is pine. Fire not only spreads less rapidly from room to room and from house to house of redwood, but a blaze is more easily extinguished. Redwood instantly absorbs water thrown against it, and a surface that is blazing may be quickly freed of flame. The slow-burning properties of holly are not so well known. It is a scarce wood and little is employed in house construction. The pioneers who built cabins with large fireplaces discovered the value of holly for the log which occupied the place of the present-day mantel. It was exposed to the heat and sparks from the fireplace. This log was of holly when it could be had. It did not take fire from the ordinary contact of sparks and the occasional lap of flame against it, and was safer than any other wood which the frontiers men could use for that part of the cabin. Alder has the same reputation and occupies the same place in Denmark and other parts of northwestern Europe. It forms the woodwork most exposed to the heat of the chimney, because less likely to catch on fire.

Waiting to see what is going to happen before getting busy at some contemplated project is an easy and natural way to make something happen that we generally profess to not want.

The man in business who is always brooding over wrongs, real and imaginary, might turn his brooder to better account by going into chicken raising.

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 505—Seeks Trunk Slats

San Francisco, Cal., July 15.—Editor HARDWOOD RECORD: I would appreciate very much if you will kindly give me the names of the large manufacturers of elm, ash and hickory trunk slats. ————.

A short list of sources of supply for the material desired has been forwarded to the above inquirer. Anyone interested can have the address of the writer upon application.—EDITOR.

B 506—In the Market for Dimension Stock

Port Washington, Wis., July 18.—Editor HARDWOOD RECORD: We desire to secure large quantities of the following:

1¼x2x38—40,
1½x2x38—40,
1½x1½x36,
1¼x1¼x40,
1¼x4—20, oak, ash or hickory

————.

Any manufacturers having this stock to offer, who are interested in getting in touch with this prospective purchaser, will be placed in communication with him on application.—EDITOR.

B 507—Oak Dimension and Oak Squares Wanted

Pittsburgh, Pa., July 14.—Editor HARDWOOD RECORD: Can you furnish us or can you advise us where we can secure a list of manufacturers of oak dimension stock and oak squares 20 to 48" in length, 1 to 4" in width and thickness, mostly 1¼, 1½ and 2"?

—— LUMBER COMPANY.

The above concern has been supplied with a list of manufacturers of oak dimension and squares. Upon application, the address of the above inquirer will be supplied to those interested.—EDITOR.

B 508—Wants Red Gum Panels

San Francisco, Cal., July 6.—Editor HARDWOOD RECORD: I am in the market for low priced red gum panels, and wish therefore that you would give me the addresses of a number of firms manufacturing the three-ply veneer stock, such as is used in the manufacture of large dry goods packing cases.

These people ought surely to be able to make a low figure, and we wish to see if these veneered panels cannot be used here for packing cases as well as for interior finish.

Thanking you in advance for your prompt attention to this matter, I am, ————.

The above party has been referred to a source of supply for the material sought. Manufacturers of red gum panels desiring to quote on this stock, can have the address through application to this office.—EDITOR.

B 509—Hardwood Dowels Required

Cincinnati, O., July 16.—Editor HARDWOOD RECORD: We use yellow pine ladder stock which has 1⅛" hardwood dowels. If you know of any manufacturers, we should be pleased to have you give us their names.

———— PUMP COMPANY.

The names and addresses of a few manufacturers of hardwood dowels have been given the above.—EDITOR.

B 510—Dimension Stock Desired

Grafton, Wis., July 18.—Editor HARDWOOD RECORD: We want large quantities of:

1½x1½x40,
1¾x1¾x19,
1x2¼x16,
1x3x16, oak, ash or hickory.

————.

Any manufacturers in a position to supply this stock can have the address of the inquirer on application.—EDITOR.

B 511—Seeks Sources of Supply for Tomato Crates

Westdale, N. Y., July 12.—Editor HARDWOOD RECORD: I am interested in the article in last number of HARDWOOD RECORD relative to the manufacture of tomato crates, and would like the names of some reputable dealers in them. ————.

The above party has been referred to a few concerns manufacturing vegetable crates. Any manufacturers of tomato crates desiring to be placed in touch with this party will be supplied the address on application to B 511.—EDITOR.

B 512—Dimension Stock in Demand

Springfield, Mass., July 11.—Editor HARDWOOD RECORD: Will you kindly send us a list of mills cutting dimension stock in oak, poplar, chestnut, birch and maple? ————.

The list asked for has been supplied. Manufacturers of dimension stock interested in this inquiry can have the address of the inquirer upon application.—EDITOR.

B 513—White Ash Squares Wanted

Indianapolis, Ind., July 19.—Editor HARDWOOD RECORD: We are in the market now for a carload of small squares which can be cut from edgings, and must be white ash. We want about 50 per cent of it 1¼ square, 20 per cent of it 1 5/16 and the balance 1⅛. This can be in random lengths so long as the minimum is 24 inches clear up to 6 feet.

We could allow one knot for each 2 feet so long as it does not weaken the stick. It can be red or white as far as sap or heart is concerned; it may be green. ————.

Those interested in making a sale in white ash squares as above specified, will be supplied the address of the consumer upon application to this office.—EDITOR.

B 514—Who Has Sycamore Lumber?

Cape Girardeau, Mo., July 17.—Editor HARDWOOD RECORD: We would like to be put in touch with large manufacturers of sycamore lumber. While we know of quite a few among our friends and competitors, we are not fully informed, and having more trade in this line than we can take care of would like to put others in touch with it.

———— LUMBER COMPANY.

The writer of the above letter has been advised that there are no large manufacturers of sycamore lumber. The lumber is produced in limited quantities by nearly all the hardwood manufacturers of Indiana and Ohio, and a scattering of logs is sawed into lumber in several points in Kentucky and Tennessee. The company has been given a list of a few manufacturers of sycamore. Any others interested can have the address on application.—EDITOR.

B 515—Wants Broom Handles

New York, N. Y., July 18.—Editor HARDWOOD RECORD: We are anxious to have the names of manufacturers of broom handles. Thanking you for any information you can give us on this subject, beg to remain. ————.

The writer has been supplied with a list of broom handle manufacturers.—EDITOR.

B 516 Wants White Ash Staves

New York, N. Y., July 15.—Editor HARDWOOD RECORD: I would appreciate it if any of your readers can put me in communication with manufacturers or suppliers of white ash circle sawn and jointed staves for tubs, ⅝" thick, 3" to 7½ or 8½" wide, 22" long. ————.

The above correspondent has been supplied with a list of possible manufacturers of the stock sought. Any others interested can have the address on application.—EDITOR.

B 517—Wants Names of Southern Excelsior Manufacturers

Memphis, Tenn., July 14.—Editor HARDWOOD RECORD: I have been advised that you can give me the names of eight or ten woodworking plants in Alabama, Tennessee, Mississippi, Louisiana and Arkansas at which is manufactured excelsior. ————.

A list of manufacturers of excelsior in the territory noted has been forwarded to the above concern. Any others desiring to be brought in touch with the inquirer will be supplied with the name by addressing this office.—EDITOR.

B 518—Ebonized Maple Wanted

Grand Rapids, Mich., July 12.—Editor HARDWOOD RECORD: Can you give us the name or names of any concerns from whom we can obtain ebonized maple such as is used for inlay work? ————.

The writer has been given the name of a concern in the East who handles this class of stock.—EDITOR.

B 519—Information on Tropical Hardwoods

HARDWOOD RECORD recently had a communication from an operator in Porto Rican hardwoods asking for a source of information from which he could be absolutely certain of the identification of various species of woods found in that section of the globe. His letter was referred to C. D. Mell, Forest Service, Washington, D. C., who answers as follows:

Washington, D. C., July 7.—Editor HARDWOOD RECORD: Your letter of July 3 has been received, and I take great pleasure in stating that I have just written to your correspondent in Porto Rico, and referred him to all the published information I know on the subject of tropical woods. Unfortunately, there is very little reliable information dealing with the commercial woods from tropical America. The published data is in the majority of cases indefinite and exaggerated, and it requires a careful investigator to be able to sift the good from the bad. No one has attempted thus far to compile a list of tropical American woods now in

the American markets, and in order to do this work properly it will be necessary to study the trees more or less closely in the region where they grow. The most valuable timber trees are very widely distributed throughout the tropics, and are known in the various regions by different local and trade names, which should be listed in each case as an aid to dealers and exploiters.

I have in my files manuscript reports on the majority of the principal woods of Central and South America, and if you have inquiries in regard to any particular kind or kinds I shall be glad to supply you with the data on hand for your correspondents.

I have offered my services to your correspondent and shall be very glad to identify samples of wood for him in case he wishes to submit them to me.

C. D. MELL,
In Charge of Wood Structure Investigations.

B 250—Wants Dogwood

New York, N. Y., July 21. Editor HARDWOOD RECORD: Can you inform us where to seek a reliable source of supply for cornel wood blocks out of which weavers' shuttles are turned? ———.

The above inquirer has been advised that cornel wood commercially is known as dogwood, and has been supplied with a brief list of sources of supply.—EDITOR.

Clubs and Associations

Semi-Annual Pennsylvania Lumbermen's Association

The Pennsylvania Lumbermen's Association held its semi-annual meeting at Atlantic City, N. J., on July 9 to 10, President J. J. Milleisen, Mechanicsburg, Pa., in the chair. These meetings, which are combined with summer outings, are attended by the families of the members, and are devoted mostly to social pleasure. About seventy persons attended and the business, which was mostly of a routine character, was disposed of on the first day of the meeting. The only prominent feature was a discussion started by Robert B. Rayner of Rayner & Parker, wholesale lumbermen of Philadelphia, on the subject of unfair cancellations of orders. It appears that there have been more than a few made by retailers of late and although the actual reason therefor is hidden, it is evident to many that these cancellations are the result of a falling market. The matter was discussed by a number of those present, who openly expressed their condemnation of such practices, as dishonest and dishonorable. Some went so far as to suggest that if the buyer may with impunity cancel his orders because of a falling market, why may not the seller do the same because of a rising market. The matter will be further handled by the directors at future meetings.

Philadelphia Lumbermen's Golf Club Plays Match

Through the courtesy of William H. Fritz, the Philadelphia Lumbermen's Golf Club played its third game of the season at St. David's Golf Club grounds, July 16. A total of twenty-seven members, divided into five four-somes, three two-somes and one single, entered the contest. The ideal golf weather stimulated the players to their best skill, and the game was an animated and thoroughly enjoyable one. As the lowest net score was a tie between H. Winfield Allen and Eli B. Hallowell, the toss of a coin was resorted to to decide which of the two should have his choice of the only nominally first and second prizes, which were really of equal value. Mr. Allen, who was the winner, chose the silver water bottle. Mr. Hallowell was equally well off with a combination cane and umbrella. The consolation prize, a set of clothes hangers, went to Harry G. Parker. A sumptuous dinner was served at 7 p. m., after which the meeting was called to order by President Frank Buck, but as there was no important business to be transacted the meeting adjourned until next month.

Meeting of Eastern Foresters

The Association of Eastern Foresters, made up of foresters from all of the eastern states as far west as Ohio, held its summer outing at the State Ranger School at Wanakena, N. Y., on July 19 and 20.

The State Ranger School is the first school of its kind east of the Mississippi river, and is attracting a good deal of attention from foresters and timberland owners throughout the East.

At the summer meeting of the association there were discussed vital questions for the Adirondacks, such as "Regulation of Slash Disposal"; "The Cubic Foot Standard for Measuring Lumber"; "What Can We Do to Increase the Supply of Rangers or Woods Foremen?" "How Shall the Public Be Induced to Support State Forestry?" "How Far Can or Should Field Studies Be Standardized?"

Philadelphia Wholesalers and Retailers in Ball Game

A most interesting game of baseball between the wholesale and retail lumbermen who are members of the Philadelphia Lumbermen's Exchange, was played at the Pennsylvania Railroad Y. M. C. A. grounds on July 15. It took the place of the hitherto annual game between the Lumbermen's Exchange and the Builders' Exchange, the proceeds of which are always divided among the local charitable institutions. The game commenced at 1:30 p. m., and at the start it looked as though the retailers, composed of a bunch of gay young hustlers, would have an easy walkover. They held the score at 5 to 1 up to the fifth inning, when suddenly something they had not calculated for happened. J. H. T. Cockey of the Tunis-Cockey Lumber Company, who is probably the oldest young man on the wholesalers' team, apparently getting his second wind, developed some first-class slugging, which so fired his colleagues that the inning closed with the score 9 to 5 in favor of the wholesalers. The latter added one more in the seventh, and each side scored one in the eighth, total 6 to 10, but in the first half of the ninth the lively youngsters added four more, tying the score, which brought the fans on their feet. This did not frighten the middlemen, however, for was not the all sufficient Cocket yet to be heard from, nor did he disappoint them when the time came, for he brought in the winning run, 11 to 10 favor of the wholesalers. It was an old time exciting game; at times there were as many coachers as fielders in and around the diamond. Efforts were made to dispute some of the decisions, but Umpire Thomas B. Hoffman of the J. S. Kent Company, who tips the scales at near 240 pounds, when he is set on a thing, it may be believed is hard to move. I. D. Miller, better known as Ike Miller, and George Howes, heavy weights, forgot their adipose, and ran like boys after foul balls.

The receipts of the game will be donated to the Philadelphia Modified Milk Society, Children's Country Week Association, Philadelphia Sanitarium Association of Red Bank, N. J., Jane D. Kent Day Nursery, Evening Telegraph Free Ice Fund and Home Missionary Society of the City of Philadelphia. The line up was as follows:

WHOLESALERS		RETAILERS
J. A. Finley	1b	Robert Bawn
J. B. McFarland, Jr.	2b	M. E. Zane
J. H. T. Cockey	3b	George Kugler
C. A. Addison	lf	Watson Malone
John S. Howes	cf	Joseph Hyde, captain
John B. Coles	rf	William C. MacBride
R. L. Boggs	ss	Wood Robinson
John Wright	p	Victor Kugler
A. T. Bliss, captain	c	Robert Gibson

Umpire—Thomas B. Hoffman.

Lumber Exporters Meet Today—July 25

The meeting of the board of managers of the National Lumber Exporters' Association, to take place in Cincinnati, has been called for July 25. One of the most important matters to come up for consideration is that of through bills of lading, and while no official statement has been made, it may be regarded as certain that this subject will be discussed at some length. It embodies various phases, each of them applicable only to a certain section of the country, and has been found very difficult to deal with in a broad or comprehensive way. Through bills of lading may be the leading topic taken up with the view to getting it in such shape that the complaint lodged with the Interstate Commerce Commission can be pushed with all the force the organization is able to command.

Special Report on Forest Fires

The Northern Forest Protective Association has issued a special report through Thomas B. Wyman, secretary and forester, which gives reason to believe that the timbered sections throughout northern Michigan are well prepared to cope with any forest fires which might occur. Special permission has been given to 150 men with full authority to act in the absence of the regular wardens, there being 22 of the latter.

The report says that early in the season practically every fire could be traced to the same source, namely, the burning of brush by settlers in clearing land. Even up to the present time most of the fires have been due to burning brush and, coupled with this, comes constant knowledge of fires caused by sparks from locomotives. Several of the more serious fires of the season have been caused by the latter agency. Fishermen and campers have been responsible for a few fires and those of unknown origin do not exceed half a dozen. Many of the fires have occurred on lands not listed with the association and some of the greater losses have occurred on lands over which the association maintained no jurisdiction.

Owing to the prevalence of brush fires, copies of the association pamphlet containing the state fire laws have been sent to supervisors, newspapers and special and regular association wardens, with the sections of the laws dealing with this phase properly marked.

At the last meeting of the directors the following officers were chosen for the ensuing year:

PRESIDENT, T. A. Green of the Greenwood Lumber Company, Ontonagon, Mich.

VICE-PRESIDENT, C. V. R. Townsend of the Cleveland-Cliffs Iron Company, Negaunee, Mich.

TREASURER, James E. Sherman, Marquette, Mich.

SECRETARY-FORESTER, Thomas B. Wyman, Munising.

It was voted to levy an assessment for 1913 of one cent an acre.

Pacific Logging Congress

The fifth session of the Pacific Logging Congress will be held at Spokane, Wash., September 24 to 27. The headquarters will be at the Spokane hotel. The tentative program which is being arranged includes the usual opening and routine business, followed by the official opening of the congress at Natatorium Park. A dinner will be given under the auspices of the Industrial department of the Young Men's Christian

Association. An automobile ride and banquet will be provided for the attendants of the congress by the Inland Empire lumbermen.

On Friday, September 26, a special Northern Pacific train will carry the delegates to Elk River, Idaho, a distance of about 150 miles. They will spend Saturday morning there witnessing the electrical and endless chain system of logging utilized successfully by the Potlatch Lumber Company, and also in viewing the electrically driven sawmill of that company at Elk River and the plant at Potlatch, Idaho.

The congress will be the guest of the Potlatch Lumber Company, and every endeavor will be made by Manager A. W. Laird to insure the pleasure of those who make this interesting trip. It is planned to return to Spokane arriving Saturday evening.

The program which is being planned will deal largely with the utilization of electricity in logging operations, the endless chain system of logging, the burning of fuel oil, welfare work in camp as well as many other interesting topics.

The railroads have made reduced rates on the certificate plan, and it is expected that there will be a very large attendance from British Columbia and the northwestern states.

Philadelphians Play Golf

The Philadelphia Wholesale Lumber Dealers' Association, through the courtesy of J. W. Turnbull of J. W. Turnbull Lumber Company, held its summer outing and meeting at the White Marsh Valley Country club house on July 10. Ten of the members of the association, who are ardent devotees of the fascinating golf, arrived on the grounds at 1:30 p. m., and speedily got into shape for their favorite sport. The rest of the members, which brought the total up to twenty-four, arrived in time for dinner at 6:30 p. m., after which the regular monthly meeting was held, the proceedings of which, however, were not given out for publicity. The day was an ideal one and spent in such a delightful rural spot was a hot weather outing enjoyed to the full by all.

Hoo-Hoo Plans Annual

The Concatenated Order of Hoo-Hoo will hold its twenty-second annual meeting at the Planters hotel, St. Louis, Mo., Sept. 9, 10 and 11. Judging from statements of the various committees in charge of the arrangements, the meeting will be the best on record. Besides the attractive arrangements for entertainment, it is promised that many important topics will come up for discussion. A number of changes of considerable importance will be proposed in the constitution and by-laws and for this reason it is urged that a particularly large representation of the membership be in attendance. Those in charge make a special request that members who cannot be present write to that effect, addressing their letters to Frank W. Trower, San Francisco, Cal.; to any member of the Supreme Nine, or to any vicegerent snark.

Following is the entertainment committee, which will have charge of all the entertainment features:

T. C. Whitmarsh, Julius Seidel, J. E. Mink, William Lothman Jr., R. B. McConnell, C. H. Coyle, Joseph Rankin, C. E. Thomas, and J. F. Judd, all of St. Louis.

Philadelphia Lumbermen on Atlantic Deep Waterways

The Atlantic deep waterways committee of the Lumbermen's Exchange of Philadelphia has returned to the exchange its report on that important subject. The report states that the committee participated in the celebration of the completion of the twelve-foot Delaware river channel between Philadelphia and Trenton, N. J. It describes the trip, which evidenced many expressions of enthusiasm all along the way. The arrival at Trenton was heralded by the firing of cannon and a reception by a large delegation of enthusiastic citizens.

The report states that the committee was profoundly impressed by the completion of one of the links of the intracoastal waterway chain. This project provides for the attainment and maintenance of a channel twelve feet deep at mean low water, and two hundred feet wide, from Philadelphia to Trenton, a distance of thirty miles.

The project when completed will connect the Delaware river with New York Bay, by way of Raritan Bay and the Staten Island Kills. By authority of Congress, the engineer corps of the United States army has completed surveys for a canal for a distance of about thirty-three and a half miles across New Jersey. This canal will take the place of the old Delaware and Raritan canal.

The connection between Philadelphia and Baltimore, and between the Delaware river and Chesapeake Bay in general, is a link in the intracoastal chain advocated by the Atlantic Deep Waterways Association.

The Delaware river furnishes free navigation between Philadelphia and Delaware City. Congress has authorized surveys for free waterways connecting the Delaware river with the Chesapeake Bay, and a favorable report has been made for the purchase of the existing Chesapeake and Delaware canal.

The connection between the Chesapeake Bay and the North Carolina Sound is provided by the Chesapeake and Albemarle canal. This canal was purchased by the government after favorable engineers' reports.

The Beaufort Cut, a short canal connecting Beaufort, N. C., with the waters of Pamlico Sound, has been completed by the government and is now open to free navigation.

The completion of the upper Delaware channel and the purchase and opening of the Chesapeake and Albemarle canal mark two very important forward steps towards the intracoastal chain.

The inside route from Boston to Beaufort, N. C., will have 104 miles of canals and will save 740 miles of outside sailing, thus avoiding the dangers of Cape Cod, the shoals of the New Jersey coast, and the dangers of Cape Hatteras. It is estimated that 1,000 disasters to shipping have occurred around Cape Cod alone in twenty years, and between 1900 and 1910 there were 5,700 disasters in the coastwise open sea route, entailing a tremendous loss of lives and property.

Lumbermen and Paint Men to Meet in the Interests of Fireproofing

The latest circular issued by Secretary J. E. Rhodes of the National Lumber Manufacturers' Association, in commenting on the recent ordinance passed by the city of Birmingham, Ala., forbidding the use of wooden shingles, states that it is the opinion of the lumber trade that it is useless to attempt to secure an annulment of that ordinance, as various other cities throughout the country are taking up the same matter, and the results would not be permanent. Instead it is proposed to approach the matter from a different angle, and the report announces that a conference is being arranged between the Paint Manufacturers' Association of the United States and representative lumbermen with the idea of arranging for the production of a fire retarding paint or compound which will sell practically at the price of ordinary paint, and which can be readily applied by the average householder.

It is well recognized that if a method can be devised for fireproofing wood, this fact together with other marked advantages which are inherent in wood as building material will place it far ahead of all substitutes. Various authorities have already stated that the fireproofing of shingles and wood structures will make their use satisfactory if the use of unprotected wood is prohibited.

New Detroit Hardwood Club

According to an announcement just received from Detroit the hardwood lumbermen of that city have organized the Detroit Hardwood Club. The members represented up to the present time are: J. P. Scranton, W. L. Brownlee, J. Ralph Sicklesteel, George I. McClure, J. M. Clifford, C. W. Leech, E. W. Leech, J. M. Butcher and H. C. Dow. The first four gentlemen named are the president, vice-president, treasurer and secretary, respectively.

The object of this organization will be the establishment of closer relations between the various members of the Detroit trade in their business dealings, and also closer relations with the hardwood lumber consumers in the city. A credit bureau will be established for the benefit of the club members, and it is expected that many other ideas will be developed that will prove of great value to the hardwood trade in general.

An Unusual Campaign

The Southern Cypress Manufacturers' Association has just issued in connection with its general campaign advertising cypress, a rather remarkable series of booklets, each of which covers some particular purpose for which cypress is well adapted. The booklets contain all necessary information on the different subjects and most of them contain plans and details showing just how the work should be carried out. The pamphlets cover sun parlors and balconies, bungalows, canoes and boats, trellises and arbors, shingle houses, pergolas, farm needs, interior trim, exterior trim, siding, tanks and silos and barns. In addition, other booklets describe Sugi effects, short cuts to good carpentry on the farm, common mistakes in bungalow building, and various other interesting and instructive information.

With the Trade

Russe & Burgess, Inc., Start Reconstruction

Russe & Burgess, Inc., began tearing down their old mill in North Memphis this week and the timbers for the new plant are now being placed. The new mill, which will be of the band variety, will be equipped with a Mershon resaw and the capacity will be in excess of 50,000 feet of lumber per day. It is estimated that it will take several months to complete the plant, and the firm has made arrangements with Gibson & Whitaker to saw its logs in the meantime. The machinery has already been ordered and will be delivered as rapidly as the timbers therefor have made its installation possible. Russe & Burgess, Inc., are engaged in the manufacture of hardwood lumber and make a specialty of export business. They maintain offices in London.

Cobbs & Mitchell Improve Factory

Extensive improvements are in progress at the big maple flooring plant of Cobbs & Mitchell, Inc., Cadillac, Mich. It is further planned to make several other improvements when the plant is shut down for its annual repairs at an early date. Cement foundations are being placed under the larger part of the mill in place of the wooden piling that has been there since the mill was erected. Two more large dry kilns are being put in which will be the most modern and efficient that can be built. They will be 150x40 feet in dimensions. Three new boilers will be installed in connection with the other improvements.

Mowbray & Robinson Company Buys Timber

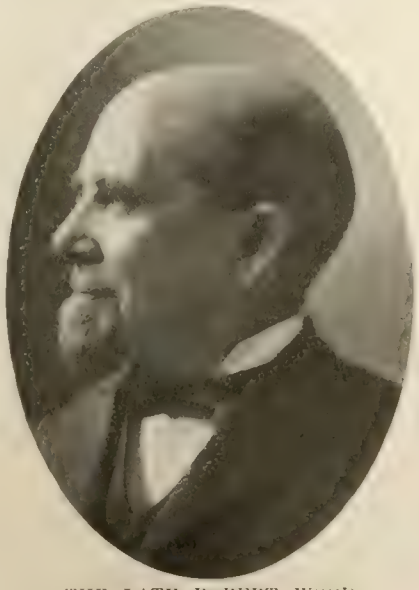
The Mowbray & Robinson Company of Cincinnati, O., has added a very large tract of timber to its large timber resources. The new purchase is in eastern Kentucky on the middle fork of the Kentucky river and comprises about 40,000 acres of the best timber remaining in that section of the country. The company expects to operate this particular tract, which is very rich in coal as well as timber, by floating out the logs to Irvine, Ky., where it has five mills running full time. This tract was bought in fee simple and with the 10,000 acres of the Taylor & Crate property recently purchased by the Mowbray & Robinson Company on Trobleson Creek branch of the Kentucky river and quite a large lot of timber rights on about 20,000 acres of land adjacent to its mills, will total up about 70,000 acres of timber now controlled by it. It is operating five mills at Irvine and Quicksand, Ky., and building another at Mazu, Ky., and will build more as required.

Change of Headquarters

The Laurel River Logging Company, formerly at Stackhouse, N. C., announces that it has moved its office from that point and henceforth will be located at 519 Legal building, Asheville, N. C.

Death of Robert Wood

With the death of Robert Wood, at White Pine, Pa., on July 6 in the eighty-first year of his life, one of the pioneers of the lumber trade of the section around Williamsport, Pa., passed away. Though Mr. Wood had not been active in the lumber business for years he maintained a keen interest in its progress and followed its development because of old associations and also for the reason that his sons, R. E. Wood, G. L. Wood and Clarence E. Wood, are prominent in the hardwood trade, they being the president, general manager and assistant general manager, respectively, of the R. E. Wood Lumber Company of Baltimore. Robert Wood was a son of James Wood, who came to this country from Yorkshire, England, where the son was born. The latter had not been in this country long before he became attracted to the lumber trade, then in its earliest development, and embarked therein with his brother, the two forming the firm of R. & J. Wood as far back as 1846. The firm continued until 1864, when Joseph withdrew, selling his interest to James Wood, Jr. This partnership existed until 1876. Meanwhile Robert Wood had become interested in public affairs and was chosen a justice of the peace in 1864, holding the office until 1881, when he was elected recorder and register of Lycoming county. He served in this office one term, until 1884, and in 1891 he was again named as justice, retaining the position for years. He was a member of the school board of Lycoming county, secretary of the Cogan House school board. He held other offices, being also an active church worker, and contributing to the newspapers of the section, besides holding affiliation with fraternities. His health remained good until recently, when he rapidly declined. It was his custom for years to spend the winters with his son, R. E. Wood, at the latter's residence, Park Place, Baltimore, his summers being spent at the old home, his wife having died in 1890. There were thirteen children in the family. The funeral took place from the family home at White Pine.



THE LATE ROBERT WOOD,
WHITE PINE, PA.

Mr. Wood took a great interest in the early history of his township and was mentioned in the local chronicles as far back as 1846, when the historian had this to say about him:

"The first effort at manufacturing lumber here was made by James Wood and his son Robert in the summer of 1844.

"This was before the days of the application of steam to such purposes or before the fine water powers of the streams of the locality had been utilized.

"The power to drive the saw in this primitive arrangement was furnished by Mr. Wood at one end of the pit-saw and Robert at the other.

"Today Robert is proprietor of a mill driven by steam which cuts 1,800,000 feet of lumber per annum."

Lumberman Enters Building Field

The Ragland-Baxter-Morford Company is the name of a new corporation soon to be organized, which has consummated a deal to take over the plant of the Edgefield & Nashville Manufacturing Company, Nashville, one of the largest manufacturers of hardwood interior finishing and fine furniture in the South. The plant of the company is worth several hundred thousand dollars, and it employs about 400 or 500 men. Charles M. Morford will be president and treasurer of the new corporation. Mr. Morford is one of the foremost lumbermen of Nashville, being president of the Nashville Lumbermen's Club. He came to Nashville from McMinnville some years ago, and has been highly successful in the lumber business. Edward Ragland and Lewis L. Baxter will be vice-presidents; E. G. Holladay, secretary, and F. C. Tower, assistant secretary. A. B. Ransom, head of John B. Ransom & Co.'s interests, will be a director

Leavitt Land & Lumber Company Changes Name

The Leavitt Land and Lumber Company of Dermott, Ark., announces that the name of the incorporation has been changed to the Dermott Land and Lumber Company. The change became effective July 10 and business is now being carried on under the new name. No change has been made in the officers and managers of the new concern. H. B. Lusch of Chicago is president; Elmer H. Adams, Chicago, vice-president; W. L. Briscoe, Dermott, manager; H. C. Luidahl, treasurer. The general offices for the transaction of business are located at Dermott. This concern is one of the large hardwood manufacturing companies in the South, specializing in band-sawn oak, cypress, gum and hickory. It controls a tract of 25,000 acres of hardwood timber in the vicinity of its mill and logs with a standard gauge railroad. It is now engaged in the construction of six additional miles of road into the timber.

Change in German Firm

F. W. Barth & Co. of Bremen, Düsseldorf, Hamburg and Emden, Germany, announce considerable changes in the personnel of their company under date of July 1. Joseph Zerchen, Sr., leaves the firm after a friendly agreement and at the same time the former Bremen representatives, Walter Zollmann of Hamburg and Walter Wolf of Bremen, and in the Düsseldorf and Hamburg houses Gerhard Mertins, buyer of the Hamburg house and B. Jarne Larssen, buyer for the Düsseldorf house, under absolution of their management, will enter the firm together under the management of the several active and passive former partners. It is further announced that Frederick W. Barth of Düsseldorf and Richard Barth of Bremen will continue in the same way as heretofore.

Big Shipment of Mahogany

What is claimed to be the largest single shipment of mahogany lumber ever made from any port in the United States is being loaded by the Otis Manufacturing Company, New Orleans, La., from its plant at that city.

Beginning with July 11 the shipping crews of the company have been loading car after car of mahogany lumber to fill an order for a large English firm at London. The order was for seventy-five carloads, all to be shipped simultaneously. Shipment was booked on two steamers of the Southern Atlantic line and the Leyland line, and both left New Orleans last week. The total value of the order was considerably more than $100,000, and President J. S. Otis of the Otis company says that it is an unmistakable indication that New Orleans manufacturers are receiving very favorable attention in the largest markets of the world. He stated that the shipment as a whole commanded the highest price he had ever known paid for mahogany lumber.

The largest order of mahogany from an American house was made about two years ago by the United States government, when $375,000 worth of rough mahogany lumber was shipped to be manufactured into furniture for the different government offices in various parts of the world. This order was filled in New Orleans in a number of installments.

Paepcke-Leicht Interests to Move

The Paepcke Leicht Lumber Company, the Chicago Mill and Lumber Company, and the various allied Paepcke Leicht interests have taken a lease for the entire twentieth floor in the first section of the Conway building, now in the course of construction on Washington street near LaSalle. It is understood that the lease is for a long period and that the aggregate will run into six figures. The present location, which has been occupied for seven years at Chicago avenue and Sangamon street, will be sold.

New Hardwood Yard in Oklahoma

The Thomas E. Powe Mill & Lumber Company of St. Louis, Mo., announces the establishment of an assembling yard at Hugo, Okla. The yard will be maintained for the purpose of drying and remanufacturing lumber for the Oklahoma trade and will be equipped with rip saws, cut-off saws and similar apparatus for sizing stock to meet individual requirements. The principal wood to be handled is oak, while other woods will be ash, poplar, cypress and various other kinds of hardwoods. William M. Drum will manage the Hugo business. It is expected that the business will aggregate from 3,000,000 to 5,000,000 feet each year.

Forest Engineers Get Large Contract

The James Maclaren Company, Ltd., of Buckingham, Quebec, has awarded the contract to survey and cruise its limits on the Lievre river to Vitale & Rothery, forest engineers, 527 Fifth avenue, New York City.

The engineers have thirty men in the field at present, and are planning to complete the work in a year and a half. The limits comprise approximately 2,700 square miles in the western part of Quebec province. A thorough cruise, survey and appraisal will be made, studies compiled of the growing capacity and reproductivity of the tract and other information gathered which will assist in putting the huge property on a scientific basis for management.

It is a sign of the progressive spirit in the Canadian provinces, when such farsighted, practical and scientific work is put into effect on some of the great timberland holdings.

Change in Company's Name

The Cherokee Lumber Company, which has a big plant in West Nashville, has filed an amendment to its charter, changing the name to the Farris Hardwood Lumber Company, and increasing the amount of authorized capital stock from $40,000 to $75,000. The company is composed of W. M. Farris, Sr., W. M. Farris, Jr., A. C. Farris, L. H. Farris and Frank Farris. It is the purpose of the company to enlarge its operations greatly in the near future.

Pertinent Information

Hearing on Through Bills to New Orleans Cancelled

The Interstate Commerce Commission has cancelled the hearing in the case of the Anderson-Tully Company vs. Morgan's Louisiana and Texas line involving the issuance of through bills of lading on export shipments of lumber over the west side lines via New Orleans. This action was taken at the request of the Southern Hardwood Traffic Bureau, which originally brought this case before that body. The west side lines have already announced that they will not issue through bills on any commodity, not even cotton, after Aug. 23. It is understood that the Illinois Central will issue revised tariffs in the near future eliminating through bills on all commodities with the exception of cotton. This case was on the suspended calendar for July 20 but the officials of the bureau thought that it was best to have the hearing cancelled in order that they might gain a clearer idea of the attitude of the Illinois Central and other east side lines. J. H. Townshend, general manager of the bureau, has recently returned from Washington, where he had a conference with the chairman of the commission during which the latter suggested that he hoped it would be possible for the east and west side lines on the one hand and the steamship companies on the other to get together on this subject without any further hearings. This is another reason why the commission cancelled the proposed taking of testimony at New Orleans July 20.

Lumbermen Lose Memphis to New Orleans Rate Protest

The Southern Hardwood Traffic Bureau has advised its members, through J. H. Townshend, general manager, that the Interstate Commerce Commission decided against that organization in the case against the Illinois Central and Yazoo & Mississippi Valley roads. It held that the rate on all lumber from Memphis to New Orleans, including cottonwood and gum, should be twelve cents per hundred pounds. The lumbermen here a few years ago were able to show that the proposed advance from ten to twelve cents per hundred was not justified, the commission at the time ruling to that effect. However, the arguments this time were not quite so successful. Manufacturers of cottonwood and gum north of the Southern Railway in Mississippi, according to this decision, are allowed a rate of eleven cents from points on the Illinois Central and Yazoo & Mississippi Valley roads to New Orleans, while those south of the Southern Railway are granted a rate of ten cents per hundred on the same items. Some of the members of the Southern Hardwood Traffic Bureau have mills on these roads in Mississippi and will profit by the concessions made by the commission with respect to cottonwood and gum. The bureau advised its members that an effort was being made to have the effectiveness of the proposed advance changed from Aug. 20, the date named by the commission, to Sept. 30 in order that the higher rates may not affect business which was booked prior to the decision of that body. This decision is regarded as of rather far reaching importance as it reverses the position taken by the commission several years ago and it is the first victory which the railroads have won over hardwood lumber interests here in several years.

Complaint Against Rate Advance on Louisville & Nashville

The complaint against the recent advance in rates on the Louisville & Nashville railroad from points north of Decatur, Ala., to Louisville, is now formally before the Interstate Commerce Commission, John R. Walker, acting as attorney for the Louisville lumbermen, putting in the complaint under date of July 11, 1913. The companies joining in the complaint are the W. P. Brown & Sons Lumber Company, Edward L. Davis Lumber Company, Louisville Veneer Mills, Booker-Cecil Company and the Ohio River Sawmill Company. The complaint alleges, among other things, that the tariff providing for the increases made the effective date seven days after the date of publication, whereas the act to regulate commerce provides for thirty days' notice, which was not waived in this case. It is also asserted that the tariff was issued as a subterfuge, in that it purported to be issued in compliance with Interstate Commerce Commission opinion No. 2026, whereas examination of the tariff does not disclose any such fact. The complaint asks for cancellation of the tariff and reparation.

Fred Esch, examiner for the Interstate Commerce Commission, held a hearing in Louisville July 18 and 19 for the purpose of taking evidence in a complaint of local hardwood concerns against a large number of railroads running into Louisville from the South and out in central and eastern territory. The complainants were the Norman Lumber Company, W. P. Brown & Sons Lumber Company, Louisville Point Lumber Company, Edward L. Davis Lumber Company, Ohio River Sawmill Company and the Booker-Cecil Company. It was charged that rates to and from Louisville are greater than those to and from Cincinnati, and the local concerns asked that combination rates be made uniform. Objection was also made to the charge of a bridge toll of 1 cent a hundred on both in and outbound shipments.

Hearing in Western Carolina Case Continued

The protest of the Western Carolina Lumber and Timber Association against recent changes in the milling-in-transit rate in effect on the Southern Railway has been continued until Sept. 8. Evidence was taken for several days and a protest was made through the association. However, Examiner C. R. Marshall of the Interstate Commerce Commission has gone to Greenville, S. C., to hear another case with the result as above noted.

The former milling-in-transit rate allowed a local rate on shipments from a manufacturing point to a milling point and after the lumber was finished it could be shipped on a through rate from which was deducted the excess of the local rate for the distance between the two local points. This really amounted to a through rate for the entire distance. The new rate, it is claimed by the lumbermen, is absolutely prohibitory and they are pleading for the restoration of the former arrangement. The lumbermen object to the fact that the new regulations prohibit the handling of common lumber on a common basis in fixing rates. They maintain that in mixed car shipments each kind of lumber contained in the car must be considered separately and where the weight of any kind is less than a thousand pounds, no refund is given from the resulting through rates. In addition, the exhaustive system of reports required by the railroads is objected to as it is claimed that it greatly increases the cost of bookkeeping and similar labor.

The delay is favorable to the lumbermen as it will give them an opportunity of more fully preparing their case.

Asks for Lower Mahogany Rate New Orleans to Memphis

The Southern Hardwood Traffic Bureau, with headquarters at Memphis, has filed a petition with the Interstate Commerce Commission, which petition is instigated by the Memphis Veneer and Lumber Company. It pleads for a rate of nine cents for mahogany logs imported through New Orleans as loading point, consigned to Memphis territory for manufacture and re-shipment. The Memphis Veneer and Lumber Company is getting largely into the manufacture of mahogany and it is hoped by this concern that the Interstate Commerce Commission will give the petition an early hearing.

Aimed at Car Shortage

It is proposed by the railroads centering in Chicago to file a new team track storage tariff to become effective Aug. 1. The rate has been $1 per diem for each day after forty-eight hours have elapsed following the arrival of the car and it is given as the reason by the railroad that various shippers and receivers of merchandise have taken advantage of this charge in order to save storage, it being stated that the cost of storing in the freight cars is in many cases less than renting storage room in warehouses. The proposal is to continue the initial charge of $1 per diem for the first forty-eight hours but to make the charge $2 for each day thereafter. It is expected that the proposal will be strenuously objected to.

Preservative Treatment of Timber

Parts 4, 5 and 6 of a work on timber treating has been published by W. F. Goltra of Cleveland, O. Former parts of the treatise were published some time ago. A good many questions are discussed which appeal more to the technical men engaged in timber treating than to the general public; but the history of methods which have been tried in the business, from the days of Pliny until the present time, is interesting and instructive. The cause of the decay of wood is a comparatively modern discovery, though the ancients probably had some vague notions on the subject. It was not generally understood that timber decays because fungus gains access to its interior and simply "eats it up"; that is, it softens and dissolves the woody cells and fibers. Modern wood preservatives are devised with the idea of keeping the fungus out; but the ancients had no very clear ideas on the subjects.

It is, therefore, interesting to study the processes tried during a thousand years to hinder the decay of wood. Some of these, accidentally or otherwise, hit upon correct methods, while others were as wide of the mark as some of the medicines concocted by Chinese doctors to cure diseases. Some of the wood preservatives that have been recommended or tried during the past thousand years or so are the following: Garlic boiled in vinegar; oil of cedar; tar and linseed oil; crude petroleum; charing and pulverized charcoal; tar and decoctions of tobacco leaves; rosin and fish oil; india rubber and oil; sulphate of iron; sulphuric acid;

chloride of zinc; chloride of mercury; soluble glass; lime water and glue; molasses; creosote.

Some of these (and there were at least a hundred others) produced good results, and are still in use; but others could have had little effect on decay-producing fungus. Anything that will keep it out of the wood will preserve the wood. That is all there is in modern wood preservation, except the question of cost. Different methods of treatment have advocates. The cost is usually figured on the expense of first treatment and the length of time it will preserve the wood. What is most expensive at first may be cheapest in the long run because it assures a long period of service.

Building Operations Jan. 1 to July 1

Building operations for June show in their aggregate that moderate decline towards which conditions had for several months been pointing. The official reports of building permits issued by 60 cities, received by the American Contractor, Chicago, reach a total value of $62,142,189 for the month, compared with $74,200,809 for June, 1912, a decrease of 16 per cent. It is interesting to note, however, that in many cities the construction activities are considerably ahead of those of a year ago, 25 of the 60 showing gains, among the more notable of which are Cedar Rapids, 154 per cent; Chattanooga, 177; Nashville, 196; New Orleans, 174; Pittsburgh, 237; Troy, 868; Evansville, 58; Detroit, 64; Cincinnati, 71, and Birmingham, 61. The decrease comes mainly from the larger cities, New York and Chicago contributing largely to the result, the former because of the enormous activity a year ago, the latter perhaps in part because of labor troubles.

For six months ending June 30, building permits issued in 56 cities reached a total of $342,415,192, compared with $364,061,631 for the first six months of 1912, a decrease of 6 per cent.

City—	Jan. 1 to July 1, 1913.	Jan. 1 to July 1, 1912.	Per Cent Gain.	Per Cent Loss.
Albany	$ 1,869,405	$ 2,242,266	.	17
Atlanta	3,111,777	3,624,840	.	14
Baltimore	5,381,404	3,673,372	46	.
Birmingham	...	...	..	..
Boston	14,413,926	11,576,786	25	.
Bridgeport	...	...	..	.
Cedar Rapids	1,351,000	775,000	74	.
Chattanooga	630,875	871,490	.	28
Chicago	47,889,600	40,892,500	17	..
Cincinnati	4,960,606	4,001,312	24	..
Cleveland	9,810,840	7,205,997	36	.
Columbus	2,696,803	2,601,122	37	.
Denver	1,557,175	2,961,005	..	47
Detroit	16,335,640	13,612,810	20	..
Duluth	2,657,759	1,048,048	154	.
Evansville	1,050,544	620,461	69	.
Ft. Wayne	1,079,082	1,355,720	.	20
Grand Rapids	1,448,315	1,204,037	20	..
Hartford	2,132,445	4,707,085	.	55
Indianapolis	5,210,907	3,996,050	30	..
Kansas City	5,268,445	6,127,658	..	14
Lincoln	1,092,415	498,435	119	..
Los Angeles	18,088,790	14,714,274	22	..
Louisville	2,307,510	3,668,490	..	37
Manchester	882,099	958,585	.	8
Memphis	2,512,024	3,021,923	..	17
Milwaukee	6,280,322	6,961,553	..	10
Minneapolis	5,930,700	6,299,265	..	6
Nashville	1,255,371	570,435	120	.
Newark	8,223,999	5,374,589	53	..
New Haven	2,093,512	2,861,613	..	27
New Orleans	2,491,133	2,112,501	18	..
Manhattan	42,941,073	73,416,697	..	41
Brooklyn	18,639,644	22,031,147	..	20
Bronx	16,112,746	20,930,794	..	23
New York	77,693,463	116,378,638	..	34
Oakland	4,580,570	4,359,090	5	..
Omaha	2,055,023	2,309,630	..	11
Paterson	7,757,619	1,162,400	..	35
Peoria	...	...	..	..
Philadelphia	21,126,485	19,349,205	9	..
Pittsburgh	9,221,046	5,428,987	70	..
Portland	7,386,895	8,798,266	..	16
Richmond	2,462,884	3,016,194	..	18
Rochester	5,385,359	6,695,809	..	19
St. Joseph	483,146	586,627	..	18
St. Paul	4,664,394	3,973,416	17	..
St. Louis	9,366,577	11,888,503	..	21
Salt Lake City	1,149,738	1,779,265	.	35
Scranton	681,933	685,833	..	1
Seattle	5,219,470	4,852,990	8	..
Shreveport	729,414	568,722	28	..
Sioux City	1,101,228	1,472,042	..	24
Spokane	1,323,595	2,187,851	..	40
Springfield	406,309	441,127	..	8
Toledo	2,933,337	3,194,925	..	8
Topeka	400,942	520,538	..	22
Troy	...	...	..	..
Wilkes-Barre	546,057	1,264,133	..	57
Worcester	2,725,315	3,008,218	.	9
Totals	$342,415,192	$364,061,631	..	6

Commercial Worth of Oak Flooring

Did you ever observe when entering a room in a residence or any building you instinctively first look at the flooring? There is nothing so quickly noticed as the flooring. If the floors of a building are oak floors you will immediately catch the note of character and quality throughout. Any building floored with oak flooring is distinctive and individual; it possesses the extra commercial worth and salability that belongs to distinctive things. Some idea of the value of oak flooring can be secured by glancing down the "For rent" or "For sale" columns of any daily or Sunday paper where they so very often emphasize the fact that oak flooring is used. It has proven to be a big factor in making sales as oak flooring even in an unfurnished house creates an atmosphere that is friendly, and when furnished it will harmonize with any kind of furniture or decoration; its color is rich and cheerful. As an example of the commercial worth of oak flooring—in Detroit a short time ago two duplicate houses were sold; one brought $6,000, and the other $5,000. The $6,000 house was floored with ⅜" select plain oak flooring at a total cost of only $280.90—this included the finishing. The house that brought $5,000 contained the original soft pine floors. The real estate man who made the deal, and who caused the oak floor to be laid over the old pine floor, knew the value of oak flooring.

The modern machinery that is used in the oak flooring factories today is entirely different from that used, say ten years ago. Oak flooring is milled to-day with an exactness under expert inspectors, that now requires but very little scraping on the part of floor layers. From time to time these factories make up floors in about ten feet squares for the purpose of analyzing and reducing the floor scraping process to a minimum after it leaves the factory. Expert testers constantly inspect the product at the different machines. Every known device that brains could design and money could buy to make a perfect floor has been put into use by these modern oak flooring plants. It is a common practice for the manufacturers to follow up their oak flooring shipments personally and watch the floor layers in the handling, laying, nailing and finishing. In this way they often get some valuable pointers and are able at times to give some valuable advice to floor layers who may not know the game. Oak flooring, after being milled and separated into the different grades, is tied up into bundles, and each bundle is marked with a rubber stamp to indicate its color and grade. The temperature of the warehouses is carefully regulated to keep the stock in normal condition. Many dealers through ignorance or carelessness handle oak flooring like they would rough lumber and store it in damp places. This is a grave mistake as dampness swells oak flooring on the face very often as much as 1/16 of an inch, so if some bundles are, say 2¼" and some 1/16" over, it naturally makes unsightly crevices. Floor layers should see that oak flooring has been properly cared for by the dealers and if it has been swelled or has taken in moisture in the dealer's yard, it is then his duty to not lay it until it has regained its normal condition. The best plan is to keep oak flooring in a good dry warm cellar or room in the house in which it is to be laid for at least a week or ten days. Oak floors are often badly damaged by incompetent layers who do not do the scraping process as it should be done. The wavy appearance that is so often noticed on oak floors is due to this careless method of scraping. The subject of laying, nailing and finishing oak floors is thoroughly covered in a booklet that is issued by the oak flooring manufacturers, and can be secured through the dealers or by addressing the Oak Flooring Bureau, Detroit, Mich., which will be mailed free upon request.

Foresters and manufacturers of oak lumber divide all the oaks into two distinctive groups, the white oak (*quercus alba*), and the red oak (*quercus rubra*). The red oak requires two years to mature its acorns, and the white oak but one year. The woods of the two groups are structurally different. In physical structure the white oak is of a much denser texture than the red oak. The white oak for flooring purposes is preferred as it receives and holds a higher polish, and is considered the most durable and satisfactory. Collectively there are about sixty (botanists do not agree among themselves on the exact number) different kinds of red oak, but commercially they are divided into two—the white oak and the red oak. The red oaks are commonly called black oaks. The lumberman usually determines the colors from the bark of the tree rather than from the color of the wood. Some species of the red oak have a heartwood of a decidedly red color. In red oak flooring there are sometimes seen pieces that the ordinary person might take for white oak, which often leads to contention on the part of the buyers. The red oak grows faster than the white oak, thereby making it coarser in texture. In quartered white oak a decidedly better figure is shown than in the red. Most timbermen know the principal oaks by sight but it takes an expert yardman to pick it out from a pile. Usually logs are marked to indicate the color before they are ripped into boards—this helps the yardman to keep the lumber apart. In segregating the two colors the texture of the wood governs the color.

The World's Railway Construction for 1911

The United States led the world in railroad construction for the year 1911, according to figures recently issued by the Bureau of Railway News and Statistics, which shows that of the total of 17,151 miles of new railroad in the world the United States built 5,394 miles. According to the figures submitted by the bureau, Europe gained 3,100 miles in 1911; Argentina built 1,860 miles; Canada, 620 miles; China, 682 miles; British East India, 2,399 miles; Africa, 2,232 miles, and Australia, 864 miles. The total railroad mileage of the world at the close of 1911 was 655,842 miles, the gain being the greatest of any recorded during the last five years, the increase being 2.7 percent. While the United States made the largest gain in proportion to any country, its gain in relation to that of former years was less. For five years the growth of railroad mileage in the United States was 7.3 per cent, as against a gain of 10.5 per cent for the entire world. Asia and Africa, according to the report of the bureau is rapidly forging to the front in railroad building. America had a total of 335,437 miles of railroad at the close of 1911, and of this amount the United States contained 246,000 miles, or 36,000 miles more than all of the railroads of Europe. The latter had a total of 210,000 miles of railroad, Asia had 65,000 miles, Africa 25,000 miles, and Australia 20,000 miles at the end of 1911.

Rate Proposals in Central Territory

Freight rates in both the class and commodity groups in the territory north of the Ohio and east of the Mississippi came in for discussion at a meeting of representatives of railroads affiliated with the Central Freight Association, which meeting was held at Chicago on Monday, July 14. Deductions and increases of considerable importance were approved, although no discussion was indulged in relative to the proposed advances averaging five per cent on the various eastern railroads.

Cost of Recent Floods

Officials of various railroad systems affected by the recent floods in the states of Ohio and Indiana estimate that the aggregate loss was close to $11,000,000. Of the various roads affected, the Baltimore & Ohio probably suffered more than any of the others, its aggregate loss being in the neighborhood of $3,000,000. These figures, however, include losses on the C. H. & D., which is controlled by the B. & O. The Big Four between Toledo and Cincinnati, Cleveland and St. Louis, and Cincinnati and Indianapolis, lost the second largest amount, it being damaged to the extent of $2,500,000. It was reported that practically the entire road-bed between Cincinnati and Dayton was destroyed. The Pennsylvania lost heavily, sustaining a loss of $1,645,000. Other heavy losers were the Toledo & Ohio Central, the Norfolk & Western, Chesapeake & Ohio, Hocking Valley, Erie, L., E. & W., Vandalia, G. R. & I., and the Wheeling & Lake Erie.

Good Logging in Memphis Territory

Weather conditions have been quite favorable for logging work throughout the Memphis section recently, and this has made very satisfactory progress. In fact there has been so little interruption since the receding of the flood waters in the Mississippi and its tributaries that the supply of timber in sight is unusually large for even this time of the year. There is scarcely a manufacturer of hardwood lumber who is not able to secure all the timber that he needs, and logs are being offered in the open market in some instances without finding takers. This is due to two conditions: The demand is nothing like so keen for lumber itself as it was a short time ago, with the result that manufacturers are disposed to go just a little slower in the matter of producing more stock, and the money market is so tight that there is no disposition on the part of owners and operators of sawmills to secure large quantities of timber against their future needs. The tendency is rather to buy only for more pressing requirements, pending further developments in connection with the market and particularly with reference to the depression in lumber circles that may result from the rather unfavorable state of trade in this country and abroad.

A prominent exporter said a few days ago that there was a very good demand for southern hardwoods from the United Kingdom but that business with the Continent was very slow and had been so for some time. He does not look for any improvement in that quarter until the Balkan war, and the resultant conflicts between the allies engaged therein, has been settled, and present indications to that end are not particularly good. This gentleman has a large European business and the falling off of demand from the Continent as shown by his orders is regarded as rather significant.

Car Surpluses and Shortages

Bulletin No. 147-A, issued by the American Railway Association, covering the car surpluses and shortages for early July, shows that the total surplus June 30 was 70,740 cars, as against a surplus on July 15 of 76,280 cars. The total surplus on July 18, 1912, was 75,389 cars.

The total shortage on June 30 was 7,036 cars, as against 6,875 cars on July 15, and on July 18, 1912, the total shortage was 6,467 cars.

From these figures it can be seen that trade throughout the country, while pretty well sustained during the month of June, began to show the effects of the summer dullness and other influences in the early part of the present month.

The Woods

The above is the caption of a new book just published by George H. Doran & Co., New York, N. Y., compiling the best of the many poems written by Douglas Malloch of the staff of the American Lumberman, Chicago.

Mr. Malloch, whose reputation as the lumberman poet is country-wide, has a satisfying way of telling about the little happenings in the woods and in everyday life. The book is nicely bound and printed on good quality of stock, and will make an excellent addition to the library of any lumberman. It retails at one dollar per copy.

Liverpool Conditions in Early July

It is reported from Liverpool under date of July 7 that no auction sales were held during the two preceding months, but that fair quantities of logs arrived from Africa on consignment, and should sell well when offered.

In speaking of American walnut the report states that logs have been sufficient for the rather meager demand, even with only moderate arrivals. The market at the time of the report was rather heavily stocked, and sales, even at reduced prices, were difficult. There was a steady demand for walnut planks and boards and low grades principally.

Forest Service Purchases 80,000 Acres

The examiners of the Forest Service have approved of the purchase of nearly 80,000 acres of land at the headwaters of the James and Shenandoah rivers in Virginia. The commission has also approved of 5,420 acres near the Natural Bridge, Va., 10,437 acres in the White Top mountain region near the border line of Virginia, North Carolina and Tennessee, and 20,087 acres at the head of the Monongahela river.

The total of these tracts makes up the largest aggregate proposed purchase passed upon at any one time by the commission. The total is 113,909 acres, and when purchased will bring the total of all national forests in the East up to 713,415 acres.

Forestry Students in Camp in Catskills

About the middle of June twenty-four sophomores and juniors from the New York State College of Forestry went into camp on the tract of one hundred acres which was given to the university for forestry purposes, and which adjoins Elka Park, near Tannersville, in the Catskills. The forest experiment station in the Catskills is located in an ideal place for instructional work for students, as it lies at an elevation of 2,100 feet, and through it runs a large stream known as the Roaring Kill.

Immediately adjacent to the camp is Spruce Top, running up to 3,500 feet, and within six miles is Hunters Mountain, a 4,025-foot elevation. This mountainous condition is very desirable in carrying on practical work in plane and topographical surveying. There are considerable quantities of timber in the section, and the station itself is covered with old hardwoods and evergreens which have not been touched by an axe during the past twenty-five years. The timber of the sections allows of splendid experiments in estimating, and during the summer the boys will estimate and map a tract of about 2,500 acres.

The studies made by the sophomore camp of students will be of distinct value to the timber owners of the Catskills, as very accurate measurements are being made of the growth of various species, and the college will be ready, as a result of these studies, to make very practical suggestions as to the proper measurement of the various kinds of woodland found in the Catskills. Each student is given a concrete problem in the management of the timberland, and he acts as though he were sent out by the state or government, makes his own field studies, and makes a complete report.

The Grinding of Spruce for Mechanical Pulp

J. H. Thickens, chemical engineer in forest products of the Forest Service, is the author of Forest Service Bulletin No. 127 with the above caption. The booklet is based upon information derived from experiments at the government pulp plant at Wausau, Wis., and covers commercial grinding practice, and then tells the purpose of various experiments describing the apparatus, methods of operation and engineering, and the various results of the experiments. Under the latter heading is shown the influence on power consumption and rate of production, and also the influence on yield and quality of a surface of stone.

Other factors covered are pressure on grinder cylinders, peripheral speed of stone, temperature and thickness of stock in the grinder pit, physical condition of the wood, power consumption per unit of strength, size of bolts and rate of growth, and efficiency of conversion.

Altogether the booklet offers many new suggestions relative to mechanical pulp ground from spruce.

Change in Curriculum Biltmore Forest School

Dr. C. A. Schenck, head of the Biltmore Forest School, announces some very important changes to take place in the curriculum of that school becoming effective Oct. 1, 1913. The school is now in camp in the timber of the Cummer-Diggins Company, Cadillac, Mich., which concern has provided the students with remarkably complete quarters.

The Biltmore curriculum will comprise two full years of twenty-four consecutive months, with no vacations. One full year is spent in the forests in the East in New York, North Carolina and Michigan and in the eastern camps of the school. The next full year is spent in the forests of the West and in the western camps. Juniors and seniors alike are allotted each winter practical work in the woods at such logging operations as are conducted under the management of graduates or in connection with the graduates of the school. One winter is thus spent in the West and the other in the East.

The study session of the school itself begins at the end of winter and ends at the beginning of winter. Furthermore, the participation in the annual German tour through the German forests will be denied to all students and to all novices lacking sufficient knowledge of the American forests.

Several auxiliary courses heretofore offered at Biltmore, including such studies as geology, agriculture, law and economics, will be abandoned so as to gain additional time for the course in engineering.

The expense necessarily connected with the two-year course remains what it was for the course of eighteen months and in addition the students will have an opportunity of earning and saving money during the winter months.

The course for the last four years has included a trip of several months duration to the forests of Germany, a stop of several weeks in the Adirondacks, followed by a trip of a month or two through the mountain regions of North Carolina. From there the students have gone every year to Cadillac, Mich., where they have been encamped in the woods, and from Cadillac they made a trip to several of the larger mill operations in the West and from there back to Germany. The new course will unquestionably very much increase the value of the school in training students for the practical work in forestry and lumbering to be done in this country under present conditions. The theoretical side of the train-

ing will not be neglected, but the useless will be eliminated and the additional time thus gained in addition to the six months added to the course will provide time for much more thorough study of the practical problems which the students must face after graduation.

Northern Cut and Shipments June, 1913

During the month of June, less hemlock was sawed than usual at this season, while a larger amount of summer hardwood was manufactured, making the total production of normal amount. Hemlock shipments were lighter than in May, with hardwood shipments in excellent volume for the time of year.

The summary of reports for the last twelve months given below, shows that during this period, hemlock shipments have exceeded the cut by 24 per cent and that hardwood shipments have gone beyond production by 4 per cent. Shipments of hemlock and hardwoods combined have exceeded the production by 15 per cent since July 1, 1912. Reports from seventy-two firms give these totals for June:

	Sawed.		Shipped.	
	Firms.	M Ft	Firms.	M Ft
Hemlock	54	50,193	62	38,303
Ash	33	954	18	690
Basswood	40	5,405	42	5,677
Beech	7	113	0	0
Birch	40	8,948	45	8,483
Elm	37	2,214	35	2,814
Maple	34	8,529	34	6,507
Oak	19	420	7	257
Mixed	20	7,775	14	3,477
All hardwoods		34,358		27,905
Total hemlock and hardwoods		84,851		66,208

The following table is interesting:

STOCKS HELD BY 46 FIRMS JULY 1, 1913, AND JULY 1, 1912

HEMLOCK

	On Hand Unsold			On Hand Sold		
	1913 M Ft	1912 M Ft	Decrease P.C.	1913 M Ft.	1912 M Ft.	Decrease P.C.
No. 1	61,430	72,056	15	2,275	5,106	55
No. 2	31,483	36,870	15	1,257	5,651	78
No. 3	23,513	18,238	29	5,054	7,846	36
Not Specified	49,959	66,994	25	14,441	18,026	20
Total	166,385	194,158	14	23,027	36,629	37

Total hemlock sold and unsold July 1, 1912.....230,787,000 ft.
Total hemlock sold and unsold July 1, 1913.....189,412,000 ft.
Decrease 18 per cent.

HARDWOOD

	On Hand Unsold			On Hand Sold		
	1913 M Ft.	1912 M Ft.	Decrease P.C.	1913 M Ft.	1912 M Ft.	Increase P.C.
Ash	707	861	18	2,715	3,268	-17
Basswood	8,717	13,233	34	15,988	16,008	—
Birch	23,125	19,644	18	29,528	32,746	-10
Rock Elm	906	1,529	41	4,078	3,373	21
Soft Elm	879	3,043	71	9,634	8,057	20
Hard Maple	10,351	12,953	20	16,229	16,083	1
Soft Maple	440	475	7	1,748	1,511	16
Oak	1,160	1,338	13	761	678	12
Total	46,285	53,076	13	80,681	81,721	-1

Total hardwoods sold and unsold July 1, 1912.....134,800,000 ft.
Total hardwoods sold and unsold July 1, 1913.....126,966,000 ft.
Decrease 6 per cent.

Proportion of total hardwood stock on hand sold, July 1, 1912—60 per cent.
Proportion of total hardwood stock on hand sold, July 1, 1913—64 per cent.
Total hemlock and hardwood sold and unsold July 1, 1912..365,587,000 ft.
Total hemlock and hardwood sold and unsold July 1, 1913..316,378,000 ft.
Decrease 13 per cent.

Hardwood News Notes

MISCELLANEOUS

The Pretlow Buggy Company recently started business at Franklin, Va.

The Wabash Lumber Company is the style of a new incorporation at Wabash, Ind.

C. B. and C. C. Howerton will erect a three-story vehicle factory at Durham, N. C.

The St. Louis Bank Fixture Company has sustained an involuntary petition in bankruptcy.

The Biltmore Box Factory of Biltmore, N. C., is an involuntary bankrupt, according to report.

The Washington Buggy Company has started business at Washington, N. C., with $300,000 capital.

The Moebus Wheel Company has started business at Boston, Mass., with a capital stock of $100,000.

W. T. Lawton & Sons of Washington, D. C., will invest $60,000 in a modern four-story carriage factory.

It is reported that the A. L. Dennis Salt & Lumber Company is closing out its operations at Dighton, Mich.

It is reported that the North Carolina Chair Company is in the process of organization at Wilkesboro, N. C.

The Booth Desk and Table Company is organizing at Indianapolis, Ind., for the manufacture of desks and tables.

The J. S. Hoskins Lumber Company has been incorporated at Baltimore, Md., with $50,000 capital stock.

The Rome Trunk Company is the style of a new corporation at Rome, Ga. This company has $50,000 capital.

The Klutz Furniture Company has started business at Charlotte, N. C. This company has $25,000 capital stock.

The High Point Furniture Company of High Point, N. C., is planning the rebuilding of its plant at that place.

The Crescent Furniture Company of Evansville, Ind., will shortly erect a $20,000 addition to its plant at Evansville.

The Huntington Chair Company of Huntington, W. Va., recently sustained an involuntary petition in bankruptcy.

The Car Works of Peoria, is the style of a new corporation at Peoria, Ill. The capital stock of this concern is $50,000.

Gurley, Ala., is to be the site of a new chair stock factory which will be erected by the S. T. Haskew Lumber Company.

The Acme Chair Company has been incorporated at Reading, Mich. The company has an authorized capital stock of $30,000.

The Milwaukee Yacht and Boat Company at Milwaukee, Wis., has increased its capital stock from $25,000 to $50,000.

The Wood-End Container Corporation has started business at Lockport, N. Y. This company is capitalized at $30,000.

It is reported that the plant of the Henry Taylor Lumber Company, Lafayette, Ind., is advertised for sale by the receiver.

The Greenmann Brothers Manufacturing Company of Batesville, Ind., has been succeeded by the Batesville Cabinet Company.

The Lampson Lumber Company is the style of a new corporation at New Haven, Conn. This company has a $30,000 capital.

The planing mill of William Garner of Chickasha, Okla., which was destroyed by fire recently, will be rebuilt in the near future.

The A. & B. Box Company has started business at Cleveland, O. This is a corporation with an authorized capital stock of $25,000.

The Greenbaum-Smith Furniture Company has been incorporated at South Bend, Ind. This company has $100,000 capital stock.

The N. A. Curtis Company has been organized at Columbus, O., for the manufacture of show cases, store fixtures and office furniture.

The D. H. Gowing Veneer Company is the style of a new incorporation at Burnsville, W. Va. This company is capitalized at $50,000.

The Leonard Furniture Company of Detroit, Mich., is about to erect an eight-story building which it is estimated will cost $750,000.

The DeVaney Lumber Company at Moline, Ill., is planning the erection of a factory at Nashville, Tenn., for the manufacture of ladders.

John C. Raum & Son of Baltimore, Md., are reported to be ready to let a contract for the erection of a large wagon factory at that place.

The E. W. Bartholomew Lumber Company of Buffalo, N. Y., has been incorporated under the same name. The capital stock is $50,000.

The Illinois Thresher Company has been incorporated at Sycamore, Ill. This company will manufacture threshers and has $200,000 capital.

The Haskell & Barker Car Company of Michigan City, Ind., recently suffered a loss by fire to its lumber yard, aggregating over $500,000.

The Galax Chair Manufacturing Company is reported to be organizing at Galax, Va. The company will erect a chair factory to cost $10,000.

The Cincinnati Wood Products Company is the style of a new wood specialty company organized at Cincinnati, O., with $50,000 capital stock.

The Fort Worth Wagon Factory, a concern at Fort Worth, Tex., is planning to improve and add to its wagon factory at Fostepco Heights, Tex.

Edward B. Jordan & Co. is the style of a new incorporation with $250,000 capital stock, organized at Brooklyn, N. Y., to manufacture wood products.

A petition in bankruptcy has been filed against the Manhattan Brush Manufacturing Company, manufacturer of brushes, 667 First avenue, New York, N. Y.

The United States Furniture Company, Evansville, Ind., has secured a permit to build an addition to its factory at First avenue and the Belt railroad, to cost $2,400.

The Des Moines Cabinet Company has been succeeded by the Jaeger Manufacturing Company, Des Moines, Iowa. The last named is a corporation with a $50,000 capital stock.

The Beaumont Hardwood Manufacturing Company has been incorporated at Beaumont, Tex., with a capital stock of $50,000. The incorporators are M. Guiterman, H. A. Perlstein and Lip Norvell.

It is reported that one Captain Basterrechea will organize the Latin-American Hardwood Company, with a capitalization of $100,000, and erect a mill in Seattle, Wash., for the manufacture of white mahogany, luna, South American cedar and oak.

CHICAGO

Secretary George G. King of the Lumbermen's Club of Chicago has sent out a notice of a special meeting to be held at the club rooms on Monday, Aug. 4, at 12:30 p. m., to consider and act on certain proposed amendments to the by-laws.

Charles H. Barnaby of Greencastle, Ind., president of the National Hardwood Lumber Association, spent the first few days of last week in Chicago on general matters pertaining to the lumber business.

S. J. Williams of the Rib Lake Lumber Company, located at Rib Lake, Wis., and John Rehfeld, sales manager of the same company, located at Merrill, Wis., were in Chicago Monday of last week.

H. B. Sale, secretary of the Hoffmann Brothers Company of Fort Wayne, Ind., spent several days of last week in this city.

Earl Bartholomew, sales manager of John B. Ransom & Co., Nashville, Tenn., was in Chicago for one of his regular visits during last week.

J. W. Wheeler of J. W. Wheeler & Co., Madison, Ark., was one of the prominent local visitors from the South during the past week.

J. F. McSweyn, president and manager of the Memphis Band Mill Company, Memphis, Tenn., has been spending quite a little time recently with the local trade.

Clarence Boyle, who has been connected with D. K. Jeffris & Co., Pullman building, Chicago, for a number of years, announces that he is planning to enter business on his own account and that he will maintain his headquarters at Chicago.

Elmer E. Perkins, who for a great many years has managed the dry-kiln department of the A. H. Andrews Company, Chicago, has discontinued his connection with that concern and will continue in the same line of business manufacturing dry kilns and condensing driers and acting as a dry-kiln expert. Mr. Perkins will maintain offices at 457-59 Monadnock block, Chicago.

Dan W. Baird, well known throughout hardwood circles, announces that he has decided to conduct his business as the D. W. Baird Lumber Company, his recent partnership with George Coale having been dissolved. The style of that partnership was the Baird-Coale Lumber Company.

HARDWOOD RECORD is in receipt of a postal communication from W. W. Dings of the Garetson-Greason Lumber Company of St. Louis, Mo., who is spending a vacation with his family at Longs Peak Inn, Longs Peak, Colo.

HARDWOOD RECORD is in receipt of a picture postal containing a print of the new Hotel Chisca, Memphis, Tenn., which is the newest structure of this kind in the city of Memphis. It contains four hundred rooms and is fireproof and modern in every detail.

NEW YORK

A large number of wholesalers from New York took in the outing of the Westchester association on July 18. In spite of low skies and rain in the early morning, the attendance was up to the average.

S. E. Slaymaker, whose company is sales agent for the West Virginia Pulp & Paper Company, says the recent purchase of 10,000 acres of spruce in West Virginia includes the best body of spruce timber in that state, the home of spruce. Besides the spruce which is the leader for S. E. Slaymaker & Co., large quantities of hardwoods are handled.

Sam E. Barr, local hardwood lumber and flooring dealer, reports a good run of business, chiefly in flooring which has come to be his leader. He shipped over a million feet of flooring in June, and looks for a bigger volume for July.

W. E. Van Wert, manager of the local office of the Emporium Lumber Company, returned last week from a trip to the mills in Pennsylvania.

R. A. Brown, local manager for the Strable Manufacturing Company, spent last week at his home near Buffalo.

John W. Love, of Love, Boyd & Co., Nashville, has taken a summer residence at Sea Gate, the exclusive ocean colony near the city.

The Kirby Lumber Company has formally opened a New York office and has made the Harry S. Lafond Company its eastern sales agent. Lee Caruthers, formerly of the St. Louis office of the Kirby Lumber Company, has come to New York to assist in the management of the Kirby business.

Lorberbaum Brothers, cabinet makers of Brooklyn, have been petitioned into involuntary bankruptcy.

BUFFALO

The Buffalo lumbermen are very active in the summer outing line this season. Following the June picnic at the Automobile Club the Hoo-Hoos became active. Vicegerent Bernard Brady held a concatenation on July 9 and took in seven members, giving a river party next day, which was well attended, the ladies being invited as usual. The day was not very pleasant at the outset, but it cleared off and closed gloriously, so that the attendants were greatly pleased with the day as a whole. Invitations are now out for a second outing of the Lumber Exchange at the Canoe Club on July 23. A third one is expected to be given.

The Hugh McLean Lumber Company is opening a new yard at St. Bernard, near Cincinnati. The company is running its mill at Chattanooga night and day and hopes to get the Memphis mill running on the same time soon. The L. A. Kelsey Lumber Company of North Tonawanda is also locating a yard at St. Bernard.

O. E. Yeager is putting in the usual amount of southern hardwoods. His sawmill at Campbellsville, Ky., is making a specialty of quartered oak flooring, which finds a ready market anywhere.

G. Elias & Bro. are actively in the lake trade and are now bringing down a cargo of Norway pine, of which they have always made a specialty. The city building is good, so that the door mill is busy.

T. Sullivan & Co. are able to report that the first half of July showed a better run of business than the first half of the same month a year ago. The specialty of elm and black ash is kept up by lake receipts.

M. M. Wall of the Buffalo Hardwood Lumber Company gives it as his opinion that the dullest part of the season is over. The company is bringing up a host of various hardwoods from the South, the yard being filled with loaded cars.

There is always business doing in the yard of I. N. Stewart & Bro., as the demand for oak and cherry is enough to keep everybody busy. H. A. Stewart was in Rochester lately, to keep in touch with his regular territory.

Oak, ash and poplar is coming up from the South to keep up the stock of the Standard Hardwood Lumber Company. The report is that business shows a disposition to improve from now on.

The planing mill concern of the Joseph Metz & Sons Company is in difficulty, being thrown into involuntary bankruptcy on the complaint of the Atlantic Lumber Company, the Empire State Lumber Company and Thomas F. Fisher, all of which have claims against it.

PHILADELPHIA

F. X. Diebold, president of the Forest Lumber Company, reports a seasonable amount of trading at this time, and sufficient orders coming in to keep the mill at Konnarock, Va., running full time. He keeps in close touch with the lumber situation and is optimistic as to the outlook.

William N. Lawton, the popular young lumberman who has been looking after the manufacturing interests of Currie & Campbell, in Jacksonville, N. C., where they control a mill carried on as the Onslow Lumber Company, has returned to Philadelphia for a stay of some months. His safe arrival here was somewhat doubtful as he navigated a forty-foot gasoline yacht of the concern which they wished brought to the city. Mr. Lawton has been made secretary and general manager of the Onslow Lumber Company. He is looking much improved after a recent illness.

The recently built planing mill of Samuel H. Shearer & Son, at Atkinson, N. C., was destroyed by fire just as they were getting fairly under way for business. William P. Shearer has been superintending the rebuilding.

J. B. Murphree of the Standard Lumber Company, Alton, Fla., recently visited the Lumbermen's Exchange and local trade.

The Bigelow-Wiley Motor Company, this city, was chartered under Delaware laws, July 9, capitalized at $50,000.

The Southern Timber Securities Corporation, Dover, Del., obtained a charter under Delaware laws, July 9, with an authorized capital of $200,000.

BOSTON

The sawmill owned and operated by Horace E. Robbins near Searsport, Me., has been destroyed by fire. The company recently installed new machinery.

The yard of the P. S. Huckins Company in East Boston has been damaged by fire to the extent of about $20,000.

Oscar Foss, one of the leading lumber merchants of New Hampshire, died early in the month following an operation at the Corey hospital, Brookline, Mass. Mr. Foss was sixty-seven years of age and had been in the lumber business for forty-six years.

The New Britain Wood Working Company, has been incorporated in New Britain, Conn., with a capital stock of $10,000, for the purpose of engaging in the manufacture and sale of interior and exterior finishing. The paid in capital is $1,500. The incorporators are Johannas Obison, William Watson and Frank Lambert.

The sawmill of Frank Dearborn, New Boston, N. H., has been destroyed by fire. In addition to the loss of the mill the fire destroyed about 3,000,000 feet of sawed lumber.

William E. Litchfield, a prominent Boston hardwood lumber dealer, has been appointed by Judge Dodge in the U. S. district court a receiver for George T. Reudle, a Boston contractor. Walter A. Sherburne of Wolfboro, N. H., a dealer in lumber and pilings has brought a bill in equity against George T. Reudle. Mr. Litchfield's bond is fixed at $35,000. Claims amount to about $50,000.

The Schmick Manufacturing Company has removed its business from Hamburg, Pa., to Oakland, Me., and will begin operations in its new quarters about Aug. 1. The reason given for the removal of this business was the scarcity of lumber. The company does hardwood cabinet work and manufactures broom handles.

There is less building being done in New England this year than last and fewer large buildings are planned. The building contracts awarded since the first of the year are over $15,000,000 less than for the corresponding period a year ago.

PITTSBURGH

The Acorn Lumber Company reports better business in July than it expected. H. W. Henninger of this company recently spent two weeks in the Northwest buying stock.

The Pennsylvania State Forestry Department has received $1,264,000 to be spent this year and next year in its work. This is more than six times what it was originally allowed in 1907 and 1908.

Harry T. Holt, age forty-nine, of J. P. Holt & Co., Ohiopyle, Pa., died July 15 at the Cottage Hospital in Connellsville, Pa., where an operation was performed. He had been a lumberman in Ohiopyle for a quarter of a century.

The Foster Lumber Company has bought another tract of 200 acres of hardwood in Ashtabula county, Ohio, and also a tract of white oak on the Western Allegheny railroad, which will produce about 500,000 feet. Both tracts will be cut off at once.

Frank Smith of C. E. Breitwieser & Co., has gotten some very nice contracts from manufacturing concerns in the East. The company's hardwood business is in splendid shape.

A. D. Knapp of the Nicola Lumber Company has been among the southern plants of the company the past two weeks hurrying up shipments. He reports the mills all busy and prices in hardwood pretty firm.

President Rex Flinn of the Duquesne Lumber Company has returned from a short stay at its big plant at Braemer, Tenn., where a splendid cut of hardwood lumber is being made.

The Allegheny Lumber Company is booking some nice orders for chestnut for use by the glass companies during their next fire. The Allegheny business the past three months has been exceptionally good.

The Pittsburgh Wholesale Lumber Dealers' Association has adjourned its regular weekly meetings until September.

BALTIMORE

Joseph B. Dunn & Sons, who purchased the plant of the Charles J. F. Steiner Mantel Company; which went into the hands of receivers some months ago, have incorporated the Maryland Mantel and Manufacturing Company to carry on the business. The new corporation has a capital stock of $25,000, with Joseph B. Dunn, James J. McGrath, James P. Dunn, Charles C. Scheidt and Joseph C. Dunn as incorporators.

Among the visiting lumbermen here within the past two weeks were V. L. Hammond of the Laurel River Logging Company of Stackhouse, N. C.; Robert Frazer of E. K. Frazer, Lemoyne, Pa., and G. C. Buckholder of the J. W. Turnbull Lumber Company, Philadelphia. All stated that the hardwood business was keeping up fairly well, and that at least as far as quantity was concerned there was little cause for complaint.

COLUMBUS

The report of the city building inspector for the month of June and also for the first six months of 1913 is very encouraging to the lumber trade. During the month of June the department issued 373 permits having a valuation of $567,791 as compared with 252 permits and a valuation of $579.116 in June of 1912. Since the first of the year the department has issued 2543 permits having a valuation of $2,696,000 as compared with 1401 permits and a valuation of $2,601,000 for the corresponding period in 1912.

W. M. Ritter, head of the concern bearing his name, sailed July 17 for his annual inspection trip of the branches of the Ritter company at Liverpool and London, England. He will also visit the continent.

Roy Lovell of the Reliance Lumber Company has returned from a business trip through the hardwood section of West Virginia.

Ernest M. Kenna of 55 Hoffman avenue, Columbus, formerly a lumber dealer in England, has filed a petition in voluntary bankruptcy in the federal court at Columbus. He gives his liabilities as $72,448.14 and his assets at $1,916. The heaviest creditor is the Edward B. Kenna Company of England, which he owes $31,000. The Stratford Ship Company of Glasgow is a creditor to the amount of $22,000.

The recently organized Jobbers' and Manufacturers' Association of Columbus has refused to merge with the reorganized Columbus Chamber of Commerce and will maintain a separate organization for the purpose of boosting Columbus-made goods.

The sawmill belonging to Howard Wilson at South Bazetta, O. was destroyed by fire recently causing a total loss.

The American Box company of Cleveland, O., manufacturer of packing cases, is looking for a site at Fremont, O., upon which to erect a large plant.

Edward J. Goulet, a well-known lumber dealer of Toledo, O., died at his late home at that city recently at the age of sixty-eight years. He leaves a wife and three children.

The Crestview Lumber Company of Columbus has been incorporated with a capital of $10,000 to deal in lumber in a suburb of Columbus. The incorporators are William B. Norton, J. Ridley Smith, Jennie B. Smith, Mary J. Norton and Russell D. Smith.

R. W. Horton, sales manager for the central division of the W. M. Ritter Lumber Company reports a good demand for all grades and varieties of hardwoods. He says both factories and yards are good buyers since the mid-year inventories are completed. All grades are moving fairly well and there is no accumulation of stocks in any place. Shipments are coming out promptly.

L. B. Schneider, sales manager of John R. Gobey & Co. says trade in hardwoods is holding up well under the circumstances with bright prospects for the future.

F. Everson Powell of the Powell Lumber Company reports a fairly good demand for all grades and kinds of hardwoods with prices well maintained.

TOLEDO

W. S. Booth, head of the Booth Column Company, reports a good line of business, orders coming heaviest from Massachusetts and other eastern points. There are no specially large orders but the volume of smaller business is heavy. Both interior and exterior columns are in good demand for residence work. The factory is running full time and at full capacity in an effort to keep up with orders. Some trouble is being experienced in securing sufficient labor to meet the requirements.

Edward C. Frank, president of the Frank-Clapp Furniture Company, recently left for Chicago and Grand Rapids to attend the furniture expositions.

Edward J. Goulet of Goulet & Co., prominent lumber dealers and manufacturers, died recently at St. Vincent's hospital from pleurisy. He leaves a wife and three children, three brothers and two sisters.

The Toledo Bending Company reports a slight cessation in the extraordinary demand which has been flooding the office. This allows the factory to catch up on its orders which have been far behind. Stock is reported as coming in well. "Prices are still holding up on the raw material we buy," said the manager of the concern. "We haven't profited any by the talked-of drop in prices. However we have to have only the best of good dry stocks, which probably accounts for the prices we are compelled to pay."

The Toledo Carriage Woodwork Company reports a good line of orders with the factory running at full capacity to turn them out.

INDIANAPOLIS

H. B. Burnet of the Burnet-Lewis Lumber Company and Mrs. Burnet are spending several weeks in the mountains of Virginia.

William C. Goble, Nashville, has been appointed to the state forestry board by Governor Ralston to succeed W. W. Waltman, who died recently.

The Dodge Manufacturing Company of Mishawaka has opened a local sales branch at 1512 Merchants Bank building, with Edwin M. Carver as branch manager.

With an authorized capitalization of $15,000, the Hardwood Lumber Company has been organized and incorporated at Wabash and will conduct a hardwood lumber business. Those interested in the company are S. A. Carr, W. C. Bright and J. I. Robertson.

A joint committee is working out plans for the consolidation of the Indiana Manufacturers' and Shippers' Bureau and the Indiana Manufacturers' Bureau. The interests of the associations are so similar it is deemed best to merge them.

A large veneer mill will be established in Arkansas by the Roberts & Conner Company of New Albany, which has recently acquired a large tract of timber in Arkansas. The equipment for the new mill is being bought and installed by J. W. Conner of the company.

Within the next month, all hardwood lumber concerns employing five or more people will have to make an extensive report to the state inspection department, accompanied by a fee of from $1 to $10 according to the number of employes. The report is required under a law passed a few months ago and must include a report of the number of male and female employes, their compensation and hours of employment. There must be a similar report relative to children from fourteen to sixteen years old employed.

Striking employes of local planing mills have agreed to drop their contention for a closed shop at present, if the employers will grant a minimum wage scale of thirty-five cents an hour and a nine-hour day. The strike began May 1. The employers have recently appointed a committee to negotiate with the strikers.

MEMPHIS

The Tennessee Hoop Company has begun the removal of its machinery from the old elm coil hoop plant to the new plant recently erected by the company for the manufacture of hoops, heading and staves in North Memphis. Heretofore it has confined its attention altogether to the manufacture of hoops but it is now equipped to manufacture all the essentials of the slack barrel. The company increased its capital stock from $25,000 to $100,000 some months ago to provide funds for financing its larger operations. The new plant is located high and dry so that there will be no interference from high water in Mississippi and Wolf rivers. This represents a distinct advantage over the old location.

The box manufacturing plants here are working on pretty full time and, while there is not a great deal of new business coming in, there is enough already on the books to keep local plants going at something like full capacity in the immediate future. One of the largest firms engaged in this line reports all of its plants here, at Vicksburg, Miss.,

and at Madison, Ark., fully engaged. Prices are pretty well maintained though in some instances, notably egg cases, they are somewhat lower. Cottonwood and gum are still somewhat scarce in the lower grades but the demand is not so active as recently, with the result that quotations are being shaded somewhat. It is not often that the manufacturers of boxes find business as good at this season of the year as it is at present. One firm said recently that its shipments during the first half of July were about $10,000 ahead of the same time last year.

C. J. Tully, vice-president of the Anderson-Tully Company and prominently identified with a number of lumber and wood-working enterprises here, is spending his vacation on the Great Lakes. He is getting to be something of a sailor and it is reported that, in his strenuous efforts to keep cool, he has made the trip from one end of Lake Erie to the other five different times. The latest advices indicate that he is now trying the virtue of the waters of Lake Michigan. Mr. Tully is accompanied by his wife and, considering the amount of energy he is spending in the direction already suggested, he is having a remarkably good time.

W. A. Ransom of the Gayoso Lumber Company, who has been spending some time in Europe lately, has returned to this city. Mr. Ransom went abroad on a combined pleasure and business trip and those who know him well have not stopped to ask whether he spent the greater portion of the time in quest of business or of pleasure.

J. W. Thompson, who recently accepted a position with Howard Cole & Co., Inc., of St. Louis, has been spending some time here during the past few days, circulating among his many friends.

The Memphis Manufacturers' Association, with which a number of prominent owners of lumber and woodworking enterprises are identified, has started a campaign for doubling its membership between now and Sept. 1. The headquarters of the state organization, the Tennessee Manufacturers' Association, were recently removed to this city and are in charge of C. C. Gilbert. J. T. Willingham, president of the Memphis Coffin Company, is also president of the Tennessee Manufacturers Association.

Theodore Cissel is erecting a new sawmill near Harrisburg, Ark. The machinery has already been delivered and the plant will be in operation some time within the next month.

The Valley Lumber Company, Camden, Ark., has acquired the sawmill, timberland holdings and the tram road of the W. L. Robinson Lumber Company near Gloster, Miss., and it has likewise acquired the timber belonging to the Batin Timber Company, Superior, Wis., in the territory tributary to Gloster. It is the announced intention of the purchasing firm, which has secured enough timber to last several years, to build another sawmill at a point convenient to its newly acquired holdings.

NASHVILLE

The Tennessee Manufacturers' Association is planning an active campaign to unite the manufacturers of Tennessee to work together for the promotion of the industrial interests. Copies of the factory laws of the state have been printed, and are being distributed among the manufacturers. Efforts will be made to greatly increase the membership.

The Blanchard Company is making preparations to erect a large spoke factory at Harriman, Tenn., which will employ about fifty men.

A. M. Stewart, a former Nashville man who operated a sawmill at Panola, near Richmond, Ky., met with fatal injuries by becoming entangled with a saw at his plant, dying a short time after the accident.

The Highland Coal & Lumber Company, with its principal office in Nashville, has been incorporated. The company has an authorized capital stock of $25,000, and plans the development of timber and mineral lands. The company is composed of W. V. Davidson, M. F. Greene, Lucien Clark, N. N. Davidson and H. M. Greene, prominent local lumbermen.

John M. Smith, who has been confined to his home about three months by illness, is again able to be on his job, looking after the Dickson interests of the W. P. Brown & Sons Lumber Company of Louisville.

The sawmill of McCaslin Brothers at Pinewood, near Centreville, Tenn., was damaged by fire, causing a loss of about $1,000. The firm was involved in litigation with Hunt, Washington & Smith, a Nashville firm at the time of the fire, and had suspended operation. A large amount of lumber, worth several thousand dollars was saved.

Mr. Nixon, of Wister, Underhill & Nixon, Philadelphia, was in Nashville, looking after local interests of his company.

W. V. Davidson, president of the Davidson, Hicks & Greene Company, has gone to Denver, where he will remain about two weeks.

LOUISVILLE

The Louisville Hardwood Club has been having its meetings out-of-doors of late, varying between Eight-Mile House and Devil's Kitchen. Chicken has been regularly the piece de resistance, and nobody has seemed to tire of it. It is not likely that a return will be made to the regular quarters at the Seelbach hotel until cooler weather makes its appearance.

The intense heat of the past few weeks has had its effect on lumber operations, work in the yards being carried on under extremely unsatisfactory conditions. Temperatures ran well over 100 degrees for several days in succession and a large number of people were prostrated. Lumbermen reported that their forces were depleted in some cases by men

Mahogany Lumber and Veneers

In buying Mahogany Lumber and Veneers of C. L. Willey, the purchaser is assured of a product cut from the finest figured wood that money and a search of the world's markets can secure.

Beyond this he is assured of prompt and painstaking service, and a quality of product not usually obtainable.

Right now stored in the log yard of the Willey plant at Chicago is more than a quarter million dollars' worth of the highest class figured mahogany ever imported to this country.

The accompanying illustration shows a corner of the assemblage of these mahogany logs.



The Willey warehouses are well stocked with a superb collection of Mahogany, Vermillion, Walnut and other fancy veneers.

An inspection is cordially invited. Take Blue Island Ave. car at the postoffice to Robey Street.

C. L. WILLEY, Chicago

Largest Mahogany Veneer and Lumber Producing Plant in the World

On the Following Stock We Will Make Special Prices for Prompt Shipment:

82,000′ 2″ No. 2 Common Poplar.
10,000′ 1¼″ No. 1 & 2 Qtd. Poplar.
20,000′ 1x24″ & up No. 1 and Panel Poplar
40,000′ 3″ No. 1 & 2 Poplar
15,000′ 4″ x 18 to 30″ No. 1 & Panel Poplar
30,000′ 4″ x 7 to 25″ No. 1 & 2 Poplar
35,000′ 5/8 x 18″ & up No. 1 & Panel Poplar
117,000′ 6/4 S. W. & No. 2 Common Chestnut
38,000′ 1 x 12″ & up No. 1 & 2 Chestnut
58,000′ 1″ No. 1 Com. Chestnut
47,000′ 5/4 No. 1 Com. Chestnut
58,000′ 6/4 No. 1 Com. Chestnut
36,000′ 8/4 No. 1 Com. Chestnut
28,000′ 4/4 No. 1 & 2 Com. Chestnut
41,000′ 5/4 No. 1 & 2 Com. Chestnut
69,000′ 6/4 No. 1 & 2 Com. Chestnut
12,000′ 6/4 No. 1 & 2 Red Birch
19,000′ 8/4 No. 1 & 2 Red Birch
86,000′ 3″ No. 1 & 2 Red Birch
6,000′ 4″ No. 1 & 2 Red Birch
21,000′ 5/4 No. 1 & 2 Cherry
10,000′ 8/4 No. 1 & 2 Cherry
88,000′ 4/4 No. 1 Common Cherry
19,000′ 5/4 No. 1 Common Cherry
10,000′ 8/4 No. 1 Common Cherry

The Atlantic Lumber Co.

70 Kilby Street, Boston, Mass.



¶ Fitzgibbons & Krebs Patent Elevated Traveling Derrick propels itself on 28-ft. gauge track.

¶ No guy wires.

¶ Write to O. M. Krebs, Mallory Branch, Memphis, Tenn., or to P. F. Fitzgibbons, Chattanooga, Tenn., for pamphlet fully illustrating and explaining the derrick.

Also ask for list of users.

The Tegge Lumber Co.

High Grade
Northern and Southern
Hardwoods and Mahogany

Specialties

OAK, MAPLE, CYPRESS, POPLAR

Milwaukee, Wisconsin

giving way under the heat, but only one death occurred, as far as noted. It was generally regarded as a good thing that business was slack, so that it was not necessary to rush the men through their work under the broiling sun.

Additional equipment will be installed in the factory of the Old Mission Furniture Company, which has increased its capital stock to $20,000. C. Shaw is superintendent.

E. B. Norman, vice-president of the Norman Lumber Company, read an interesting paper before the Louisville Hardwood Club recently dealing with sawmill operation. Mr. Norman took the ground that in order to succeed, the modern operator must study the requirements of his customers, and make specialties as to widths and lengths which suit them, rather than the staple dimensions.

J. C. Colgan, superintendent of the Holly Ridge, La., mill of the Norman Lumber Company, has recently been in Louisville, recovering from severe attacks of malaria, which prevented his enjoying his vacation in New York.

Lumbermen report that their customers in the furniture trade have experienced an unusually good selling season at the exhibitions.

D. E. Kline of the Louisville Veneer Mills stated that recent figures published regarding the meeting of the Quartered Oak Veneer Association at Indianapolis were somewhat misleading. Mr. Kline presided over the meeting. The figures quoted showed that the manufacturers had on hand last January 2,255,000 feet of 1-20″ veneers, and in June 4,235,000 feet. The discrepancy is explained, Mr. Kline said, by the fact that the original figures were net, after stock sold had been deducted, whereas the later figures were for total amounts on hand, regardless of orders for future delivery.

The Roberts & Conner Veneering Company, New Albany, Ind., has purchased 800 acres of hardwood timber near Newport, Ark., and will install a veneer and sawmill. It has purchased an eight-foot bandmill, and is now in the market for a used 60″ or 66″ rotary machine and an 8′ veneer saw. The construction of the plant will begin shortly, and operations will be under way by October. The tract includes oak, gum and hickory.

ST. LOUIS

The Lumbermen's Exchange of St. Louis has added quite a number of new firms to its membership during the past few days. Among those to join were: The Henderson-Molphus Company of Philadelphia, Miss.; Wisconsin Lumber Company of Huttig, Ark., and Chicago; Charles Knott & Co., New Madrid, Mo.; M. E. Leming Lumber Company, Cape Girardeau, Mo., and the P. R. Walsh Tie and Timber Company, St. Louis.

President Smith of the Lumbermen's Exchange has sent out a letter to the members, containing the following valuable information:

A very important consideration is that the Frisco, Iron Mountain and other Missouri railroads have prepared or are preparing tariffs establishing rates on lumber and ties on intrastate business in Missouri as prescribed by the 1907 maximum freight rate law just upheld by the Supreme Court. Members should keep in close touch with the secretary's office so that every advantage may be gained in present and future deliveries. In many instances this means a marked reduction in actual rates but the railroads are endeavoring to recoup by denying reconsignment privileges, the absorption of switching and transfer charges, etc.

Thos. E. Powe, president of the Thos. E. Powe Lumber Company, left last week with his wife and little daughter for Waynesville, N. C. He will remain with them but a short time and later in the season he will go down and join them for a prolonged stay.

The C. F. Liebke Hardwood Mill and Lumber Company received a big shipment of ash logs last week. The shipment came in by barge and contained about 750,000 feet. The mills of the company, which have been closed down for several days until a couple of weeks ago on account of a part of the machinery breaking down, are now working to make up for lost time. The working time has been extended from nine to eleven hours and the force has been added to.

E. W. Blumer, sales manager of the Lothman Cypress Company, says that while business is a little quiet it is satisfactory, as nothing very brisk could be expected during such extremely hot weather. Mr. Blumer will be at home for a short time and then start out on one of his selling trips.

The Garetson-Greason Lumber Company has been doing its usual good business. The mills are working all right and turning out plenty of stock and there is no trouble, W. W. Dings says, in disposing of it at a satisfactory price.

Secretary George McBlair of the Lumbermen's Exchange says that the inspection of lumber is now nearly 500,000 feet a month, and is increasing right along.

The Thos. E. Powe Mill and Lumber Company is the name of a new company identified with the Thos. E. Powe Lumber Company of St. Louis, which has been opened at Hugo, Okla. It will be used as a remanufacturing and drying yard for the St. Louis company. Oak will be the leading item handled. W. M. Drumm has been appointed as the manager.

ARKANSAS

On July 19, 24,350 acres of hardwood timberland, lying in Jefferson, Lonoke and Arkansas counties, Ark., were sold by the Union Land and Timber Company, an Arkansas corporation, to the Kentark Land and Lumber Company of Louisville, Ky., the consideration being $400,000.

So well pleased were the officers of the Kentark Land and Lumber Company with their investment that, after inspecting the land and hardwood timber on it, they immediately purchased a controlling interest in the Varner Land & Lumber Company which operates a plant at Geridge, Ark., and owns 13,000 acres of hardwood timberland. The combined acreage of these two concerns is the largest hardwood tract in Arkansas. These tracts lie along the main line of the Cotton Belt railway and are also partially traversed by the Stuttgart and England branch of that road. The Varner Land and Lumber Company is at present erecting a big hardwood sawmill on Crooked Creek between England and Stuttgart, which will give employment to 400 men. This plant will draw from 125,000,000 feet of hardwood timber. As fast as the timber is cut from the land the large tracts will be divided into small farms and sold for agricultural purposes. This land is particularly adapted to growing rice, cotton and corn. A new town is also being built at the site of this big mill.

The engineers of the Missouri and North Arkansas Railway Company are at present in Searcy, Ark., laying off the switch and yard tracks to the new veneer plant which is being installed by Conner & Roberts at that place. This plant is being moved to Searcy from New Albany, Ind., and will be in operation in a short time. The new plant will give employment to fifty men.

MILWAUKEE

Capt. Charles Ellis, for many years in charge of the interests and operations of the John Schroeder Lumber Company in northern Wisconsin, has resigned. Capt. Ellis resigned the first of the year but the resignation has just taken effect. F. M. Clark, the Ashland manager, has been placed in charge of the Schroeder company's mill, yards, etc., in Ashland and vicinity. The main office in Milwaukee will, however, directly handle the company's interests elsewhere in the northern part of the state.

Col. J. T. Barber, president of the Northwestern Lumber Company at Stanley, and at the head of the Barber Lumber Company of Boise, Idaho, will soon begin operations on the 30,000 acres of timberland in the West. After considerable legalities with the government, the title of the land was sustained by the highest courts. A railroad will be built to the mill, one of the largest lumber mills in the Northwest.

A. M. Paulson of Hawkins has purchased a half interest in the Barron Lumber Company at Barron, and will assume the management. The retiring manager, Mr. Jensen, will take a much needed rest before embarking in any other business.

T. A. Tack of Marshfield and H. A. Martin of Spencer have incorporated as the Spencer Lumber & Supply Company. The mill and warehouse are located at Spencer.

The Eureka Cooperage Company has started operations in its plant at Menasha. This concern is a new one and will manufacture a patent beer keg.

The Northland Lumber Company, at Green Bay, has completed improvements at its mill and is about ready to begin operations. Six new boilers have been installed, and with other improvements such as on the saw and planing mills $15,000 have been spent. One hundred and twenty-five men will be employed when the full crew is at work. One crew has been peeling logs in the yards since spring. Work in the camp in northern Michigan, where the concern owns 25,000 acres of timberland, has been going on and a trainload of logs is being received daily.

The New Idea Plaster Board Company has been incorporated at Fond du Lac, with a capital stock of $5,000. E. H. Jens, Herman Prehn and John Fellrath are the incorporators.

The Sterling Manufacturing Company of Racine has been incorporated with a capital stock of $10,000. Woodenware and hardware specialties will be manufactured. E. L. Osborn, L. Powell, George H. Shurr and C. C. Gittings are the incorporators.

The C. H. Driver & Kerr Company has been organized at Racine for the purpose of operating a planing mill.

Joseph Biba is to become manager of a new furniture factory about to begin operations at Muscoda. The factory is under construction, and will be 42 by 98 feet, one story and basement, hollow tile construction, with an engine room in the rear. The company has $15,000 stock subscribed and $10,000 in the treasury. J. C. Heffner and Frank McVay are also interested. About forty men will be employed.

The Consolidated Lumber Company, operating yards in various towns of the state, is conducting an extensive advertising campaign in the local newspapers of these towns.

The death of William H. Knox, one of the early lumbermen of the Wisconsin river valley, occurred recently at Houston, Tex. Mr. Knox was born in New Hampshire in 1834. For many years he was associated with his brother Samuel in the lumber business on Mill Creek in the town of Carson. As Knox Brothers they built a sawmill in the early seventies on the site of the old Weston mill at Stevens Point. The plant was destroyed by fire in 1876 and they were succeeded by Bosworth & Reilly. After leaving here they continued their operations in Price county and near Duluth, Minn. In 1900 Mr. Knox associated with his son Hiram at Hemphill, Tex., where they conducted a large sawmill. He was seventy-nine years old and is survived by his widow besides the above mentioned son.

The will of W. H. J. Kieckhefer, who died recently at Milwaukee, has been filed for probate. Mr. Kieckhefer was organizer and vice-president of the Kieckhefer Box Company. His will disposes of $750,000 in personal property and $50,000 in real estate. All is held in trust, with its income to be paid to the widow, who is also given the summer home at Pewaukee lake and the residence at 2904 Highland boulevard. Upon the widow's death, the estate is to be divided among the children—Robert J., John W., William H. O., Herbert, Walter and Martha Kieckhefer and Mrs. Dora Wurster.

Nicholas Marette, a wagonmaker at Appleton, has completed a wagon for the Interlake Tissue Paper Company at Merriton, Ontario. The Canadian company had the wagon made here on account of the high price demanded in its own country.

The Union Manufacturing Company, Oconto Falls, has begun operation at the sawmill erected but recently. The mill is equipped to manufacture lumber, ties and shingles, and has a large supply of hemlock, cedar, beech,

MEMPHIS

E. Sondheimer Co.
Wholesale Manufacturers and Exporters
RED GUM
SAP GUM
COTTONWOOD
CYPRESS
ASH
PLAIN OAK
QUARTERED OAK
HICKORY
SOFT ELM
SYCAMORE
All Grades and Thicknesses
We make a specialty of mixed cars of Sap and Red Gum, One-half to Two inches thick.

VANDEN BOOM-STINSON LUMBER COMPANY
Manufacturers Southern Hardwoods
Quartered Oak a Specialty
Memphis Tennessee

TIMBER ESTIMATES
REPORTS INCLUDED
TOPOGRAPHICAL MAP, DETAIL ESTIMATES & WRITTEN REPORT
GARDNER & HOWE
ENGINEERS
Clarence W. Griffith Department Manager, Porter Building. Memphis, Tenn.

The Mossman Lumber Co., Inc.
Manufacturers
plain and quartered red and white oak, ash, gum and poplar.
ALSO FULLY EQUIPT DIMENSION PLANT
Memphis, - - Tenn.

maple, birch, elm and other hardwoods in its pond to keep running until winter.

The Randolph Wagon Works Company will deliver from 6,000 to 8,000 wagons during the next year according to the plans made at the meeting of the officials. J. J. Blochwitz was elected president; C. E. Hutchinson, vice-president; R. F. Roberts, secretary; Wm. Pritchard, treasurer; Charles Anspach, Owne Pritchard, R. T. Roberts, O. A. Sasada and James E. Barstow, directors.

The sawmill and 4,000 feet of lumber belonging to Julius Strehlow and located on the Little Twin lake was recently destroyed by fire when lightning struck the mill.

WANTED

All Kinds of High-Grade

HARDWOODS

S. E. SLAYMAKER & CO.

Representing WEST VIRGINIA SPRUCE LUMBER CO., Cass, West Virginia.

Fifth Avenue Building, NEW YORK

Kentucky Lumber Company

MANUFACTURERS

POPLAR, PLAIN AND QUARTERED OAK, RED AND SAP GUM, ASH, CHESTNUT, BASSWOOD, HEMLOCK, WHITE PINE

Mills at Burnside, Ky. Williamsburg, Ky. Isola, Miss.

Sales Office Cincinnati, O.

Bluestone Land & Lumber Company

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Soft White Pine, Oak, Poplar, Chestnut, Hemlock

Band Sawed Stock

MILL FACILITIES COMPLETE PLANING

RIDGWAY PENNSYLVANIA

AT HALF PRICE

STEAM SKIDDER AND LOADER COMBINED

Clyde Modern Equipment. Used about sixty days. Operations discontinued. No further use for it

For Particulars Write

GOGEBIC LUMBER CO.

GRAND RAPIDS, MICH.

The sawmill of the Bergland Lumber Company, Milwaukee, burned recently at Bergland, Mich., on Lake Gogebic. The loss of $55,000 is nearly covered by insurance.

The Suburban Lumber Company, Thirty-third street and Villard avenue, North Milwaukee, suffered a loss of $20,000 by fire recently. A shed and a half of lumber was destroyed, the fire probably starting from cinders. William J. Koerper is president of the company. The loss is covered by insurance.

The Hardwood Market

CHICAGO

The quiet tone of the local market continues without any particularly prominent features. Nothing of a drastic nature has occurred to give the local trade cause for undue alarm, nevertheless the local buying element does not seem to be in the market under present conditions for any large purchases. This does not mean that they are not using a considerable quantity of lumber, for they are buying a good deal of stock mostly for immediate shipment. In fact a great many of the orders taken within the last few weeks by the local trade have been marked "rush" and are designed for immediate use.

It is probably a fact that finances have more to do with the present state of trade than anything else, as almost without exception Chicago lumbermen are reporting collections to be in very poor shape. The logical deduction from this fact is that the buying trade is not overburdened with any undue surplus of cash. Their ordinary policy under these circumstances is to invest as little money as possible in raw material, as there is not much chance of the general prices of lumber rising, while on the other hand they feel that they are not losing anything by waiting in the hope that prices will break.

So far the general run of sales does not show any general depression of market values, and it is the prediction that trade will continue on the present basis for five or six weeks, and that the fall will see a very marked improvement.

The factory trade has been in very fair shape as far as its own business is concerned, although it did not report any remarkable orders. On the whole, however, it is not depressed and it is safe to assume that the predictions of excellent fall business of the majority of the lumbermen of this market will become a fact.

NEW YORK

The local hardwood market reflects the dullness that has been evident in other lines of lumber for the past two or three months, though to a lesser degree. The financial condition is having its effect on the lumber trade, and banks are refusing to make building loans. While this affects the building lines in lumber more than it does the hardwood end, nevertheless this action on the part of the banks is responsible for the inactivity in the local trim manufacturing trade and tends to curtail the consumption of hardwood lumber. Some are inclined to believe that greater New York is at present overbuilt, while others think the action of the banks is due more to political conditions.

Hardwood prices in most cases remain unchanged but for the first time in a great many months plain oak shows a decline. The reduction in the price of this stock, however, is only slight and is traceable to mill conditions which, report has it, show more and better stocks on hand. Some items of maple flooring are also quoted lower than a month ago, but with these exceptions the list remains unchanged and no complaint is made of going prices.

BUFFALO

Some of the members of the local lumber trade are inclined to complain of the rather slow movement of the trade, but others agree that being midsummer it is good enough. Still others are expressing the belief that the slackest part of the season is already over. They say that the furniture exposition reports are especially encouraging and if Congress would only get its work done and go home the crops would restore entire confidence in business generally, and lumber would sell briskly.

There are a few members of the Buffalo trade who feel that they can afford to mass up all the stock they can find. They say that the amount of it, especially hardwood, in sight is small and when the fall trade sets in it will take all the surplus, if it is as active as they think it will be. Certain good hardwood salesmen are coming home from eastern trips and reporting a good list of orders, all of which looks good.

The demand for hardwood flooring is decidedly active. Cypress is dull and there is not much movement of most Pacific coast woods, although California and Idaho pines are moving pretty well. Prices are stationary, as they usually are in summer, for it seldom pays to urge sales by cutting the price. Plain oak leads as usual. The demand for ash and maple is good, but elm and basswood move slowly. There is a good activity in Pennsylvania hardwoods and hemlock moves at a good rate.

PHILADELPHIA

Although the general lumber business is more or less affected by the naturally attenuated summer trading, the hardwood situation for the last fortnight has been satisfactory, a conceded improvement even over the last half of June. A little wavering is reported in one or two grades of the standard woods, but on the whole values have been well sustained with no signs of a general weakening anywhere. It is evident the hardwood market is under better control than the softwood, and the manufacturer apparently is at ease as regards the situation. In addition to the midsummer hiatus, the tariff agitation, the new currency bills and the disturbed local and state political situation, and the strikes are drawbacks to contend with, but notwithstanding this growing pile of obstacles a significantly optimistic tone is recognizable everywhere.

The city has finally won the battle in Harrisburg, giving it the right to build and own subways and elevated railroads, and the work on these improvements is to begin at once. The new piers and dock extensions decided upon will add miles of shipping facilities, and mean an expenditure of millions of dollars. The favorable report of the secretary of the navy as to a possibility of increasing the barracks and building a 1,700 foot dry dock, which would make this the greatest naval station in the country, bespeaks a prosperity not too remote to infuse new life into the commercial world. Forty-six vessels, including battleships, torpedo boats, vessels for Panama canal traffic, down to ferry boats, are being built at this time in the three ship yards on the Delaware river.

No material change is apparent in the relative positions of the various woods. Oak, ash, maple, birch and basswood are strong; veneer and mahogany continue active; cherry, beech and poplar keep an even tone; chestnut, both high-grade and sound wormy, is unweakened.

PITTSBURGH

The hardwood market for midsummer is showing a pretty good degree of activity. Although there is no big volume of business, dealings show that in some lines of manufacturing, especially the glass industry and with the auto and implement people, buying is fairly brisk. Yard trade is slow but steady. Retailers have been poor buyers of hardwoods the past few weeks as building operations have not come up to their expectations. Prices are holding firm and a good buying improvement this fall is looked for.

BOSTON

There is a larger volume of business reported for hardwoods than for softwoods, but even so, the demand is not so large as it has been at times in the past. It is expected that there will be considerable more activity as the fall trade starts in. July and August usually find buyers a little slow to increase their reserve stocks and this season is no exception. The manufacturers of interior house finish are fairly busy. Furniture manufacturers, while moderately busy, are complaining a little of a lack of buying in any great volume. The piano trade has fallen off somewhat. One thing that the hardwood lumber merchants are complaining of at present is the slow way that buyers are settling their accounts.

Offerings of some grades of lumber in the thickness wanted by buyers are smaller than usual. Prices throughout the list are well held. Both plain and quartered oak hold firm with a good demand reported. Maple flooring has been selling better in some cases, owing to the high prices of oak. Birch and ash are in moderate call.

BALTIMORE

It does not appear that important changes have developed in the hardwood business here. Some of the members of the trade state that they have found not so much an easing off in the inquiry as greater freedom in the offerings, with the result that the range of prices is lower than it has been. Others—and they are less numerous—maintain that they are getting about the same returns, while the movement is kept at its former level, there being no modification of consequence in the general situation. The weight of evidence, however, seems to be on the side of those who report more liberal offerings and a lower tone in the quotations, with the buyers rather disposed to hold back for the present in order to see what the near future may bring forth. It appears to be beyond doubt that some of the items on the hardwood list have gone off from $2 to $3 per 1,000 feet. Among the woods affected is oak, which cannot be said to have become inherently weaker, but which advanced rather more than the rest of the list last winter, so that whatever decline has taken place of late merely means that oak has about gotten back to where it was. Chestnut also is perhaps not quite so strong as it was a short time ago, though the gain of $3 per 1,000 feet over prices for the corresponding period of last year is being fairly well maintained. The demand, however, is less urgent than has been the case. The edge seems to have been taken off of it, as it were, and the sellers find it harder to get orders. As for the rest of the list, it is much as it has been, very nearly the same level having prevailed throughout the whole of the past year. As far as can be learned the mills have managed to catch up with the needs of the trade, and no shortage of lumber is now apprehended. This is perhaps responsible largely for the hesitancy of the buyers, who feel that they can have their orders filled at any time, and who find that there is no necessity to look a long way ahead. This, to be sure, results in many instances in buyers having to pay somewhat more for lumber, but the purchasers are willing to take chances when it comes to this.

The foreign market shows no improvement; in fact, conditions abroad appear to have become even more discouraging in the past two weeks. Stocks are still going forward in fairly large quantities, although the movement seems to have been somewhat arrested, and there is no improvement in the range of prices offered. Oak planks are in such supply that the buyers are taking advantage of the situation to demand concessions and also resort to the expedient of making rejections, which reduces the returns to the shippers. Poplar is also in fairly liberal supply, with the requirements so limited that the range of prices abroad is easy. Even

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Hardwood Manufacturers and Jobbers

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HIGH GRADES IN SOUTHERN HARDWOODS A SPECIALTY

CONASAUGA LUMBER CO.
MANUFACTURERS HARDWOOD AND PINE
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HARDWOODS, WHITE PINE and HEMLOCK
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OAK, POPLAR AND OTHER HARDWOODS
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KILN DRIED OAK
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are one of our many "specialties" which are so satisfactory to others. Why not you?
Might pay you to get in touch with us. It has others
THE M. B. FARRIN LUMBER CO.

Kraetzer-cured LUMBER

TRADE MARK REGISTERED IN U. S. PATENT OFFICE

¶ Kraetzer-Cured lumber is susceptible of being thoroughly air dried or kiln dried in less than one-half the time ordinarily required for seasoning unsteamed wood.

¶ Kraetzer-Cured lumber does not case-harden, check, end-split or stain, and dries without warping or buckling.

¶ Kraetzer-Cured lumber has a uniform tone of color. Its working qualities are greatly improved, and the beauty of the flake on quarter-sawed stock is enhanced.

¶ Kraetzer-Cured lumber dries out to materially less weight than unsteamed wood, ranging from 200 to 500 pounds per thousand feet.

¶ Kraetzer-Cured lumber will neither shrink nor swell, and the grain will not raise when water stains are employed in finishing.

¶ Kraetzer-Cured lumber is not impaired in strength or quality by the process.

¶ Kraetzer-Cured lumber eliminates all glue-joint troubles and "will stay where it is put."

¶ A list of manufacturers of Kraetzer-Cured lumber will be supplied on application.

Kraetzer-Cured Lumber is produced by the use of the Kraetzer Preparator, manufactured by

The Kraetzer Company
537 S. Dearborn St., CHICAGO

TRADE MARK REGISTERED IN U. S. PATENT OFFICE

Kraetzer-cured LUMBER

extra wide stocks have felt the effect of the letting down in other directions. What seems to have caused a recession in prices is not so much inherent weakness as the general tendency to defer business as long as possible. If proof were obtainable, it would probably be found that the last few months have been a period of underbuying.

COLUMBUS

The hardwood trade in Columbus as well as all parts of central Ohio has been rather active during the past fortnight. There is a good demand for stocks both for manufacturing establishments and retailers. The former are probably the best buyers at this time, owing to the general activity which prevails in manufacturing circles. Prices are well maintained and no weakness of consequence has appeared recently.

One of the best features of the trade is the better buying since the completion of the July inventories. Both factories and yards were interested in the inventories and after they were made, stocks generally were found to be very light. As a result buying was done on a more liberal scale. Building operations in all parts of the Buckeye state are fairly active and this is a source of demand for many varieties of hardwoods. It has been ascertained that dealers' stocks generally are light, the policy of retailers being to buy only what they want for immediate needs. Factory stocks are light and purchasing agents are not stocking up to any extent. There is some demand from railroads for stock. Shipments are coming out promptly and little trouble is experienced from a car shortage.

Quartered and plain oak is in good demand and prices are strong. Stocks are light and no weakness in quotations is anticipated. Chestnut is in good demand, especially sound wormy. Poplar is becoming strong and accumulated stocks are being sold. Automobile factories are buying the wide sizes better. Ash and basswood are in good demand and other hardwoods are unchanged.

CINCINNATI

There is little improvement in demand for hardwoods. The wholesalers in this vicinity are doing a light but steady business and do not expect orders for quantities for the next couple of months. There is plenty of lumber on hand and in this immediate vicinity there is quite a little cutting in prices to obtain some business. This does not come from the Cincinnati dealer as a rule, but principally from the small millmen in Kentucky and Tennessee points, who prefer to sell direct and usually make close prices under all conditions, and at times like this when buying by the wholesaler is light they appear more frequently and dump some stock on the market. This low priced stock does not cut much figure usually, but when business is slack some manufacturers of wood goods who usually buy well manufactured stock only will take a chance on this usually poor manufactured stock, and the result is a temporary benefit to the small producer. Prices, except for the above mentioned lumber, are well maintained and the wholesalers are content to keep their stock for better prices and expect that there will be a very good demand in the fall.

Dealers who handle poplar extensively report a slight improvement, and feel encouraged. Wide stock is in better demand and there is no trouble with No. 2 and 3 grades. Firsts and seconds are moving a little better, planing mills appearing to be cutting more than for many months. Prices hold firm.

TOLEDO

Some dullness is noticeable in the local market and prices have a slight downward tendency sympathizing with yellow pine which has developed considerable weakness during the past month. The demand is slow and there seems to be little inclination among buyers at present to make any purchases except for present needs. Retailers are enjoying a good demand in the city, as the building trades are extremely active. This makes a good demand for hardwoods as practically all the new homes being erected are of purely modern construction and require considerable hardwoods for floors and finish. Many factories are closed for inventories and repairs which makes a shortage in demand for hardwood for manufacturing purposes. Red oak is leading what demand there is. Red gum is showing some weakness.

MEMPHIS

There is a fairly active business in hardwood lumber, though there has been some slowing down during the past month and prices are, if anything, slightly easier than a short time ago. Buyers are showing a disposition to take lumber only for their more immediate requirements and there is a notable falling off in the size of the orders. This is more remarkable than the decrease in the number of orders themselves and accounts in large measure for the fact that the aggregate business is considerably smaller than earlier in the summer. This decrease in business, however, is not regarded by the trade as anything more than the natural slowing down incident to this time of the year and there is no pessimism felt on this account. In fact there is a disposition among members of the trade here to anticipate a good business this fall and winter when the tariff has been settled and the new currency bill has been enacted into law. Money is tight now, tighter than it has been for

some years at this time, and this is an influence which is operating against large undertakings on the part of any branch of the trade. The prospects, however, are for an exceptionally large cotton crop this season and if these materialize the situation from a money standpoint will show a sharp and quick change this fall when the crop begins to move.

The foreign political situation is clearing up slightly and there is a brighter prospect of business with the continent, but the bill of lading controversy has not yet been settled and exporters here have refused to close contracts for freight room for next season on the basis of the high rates and numerous restrictions imposed by the steamship companies, with the result that the export outlook is clouded at the moment.

INDIANAPOLIS

While midsummer dullness continues to some extent in the local hardwood market, there have been a few more inquiries during the last two weeks. Fearing the imminent car shortage, retailers are beginning to see the wisdom of ordering what they will need for the fall trade.

There has been some little improvement during the last two weeks and the situation is a little better than it was at this time last year. The best demand is for oak and mahogany for interior finish work and for poplar. There seems to be a good supply of all grades and varieties of hardwoods that are carried in this market. Prices have not made any perceptible change recently.

NASHVILLE

The Nashville hardwood market is now in the midst of the summer season, and business is of light volume. Nashville firms state that they have fairly good stocks, but there is no surplus, and it would probably be difficult to secure any material concessions in prices in order to force business. Oak continues to have a healthy tone, and values hold fairly well on chestnut, poplar and other lines of hardwood.

LOUISVILLE

Business is a little better than there is any reason for expecting it to be in July. Not a great deal of new business has made its appearance, but enough orders have been on the books to carry the trade through the dull season in excellent shape. July will be well above the mark set by the corresponding month of last year, although of course it will not come close to equaling the record of June, which with some companies was the best in their history, and with many in excess of all demands since 1906. The prospects are for improved trade in July, the successful conclusion of the furniture exhibits, the return of many vacationists, and the prospects for an early adjournment of Congress being among the favorable factors.

Prices have been shaded in only a few instances, poplar and chestnut being the slow movers and getting the benefit of the chief concessions. Quotations in oak, both plain and quartered, ash, gum and other woods have been well maintained.

ST. LOUIS

There has been a seasonable hardwood trade during the past two weeks. The call for the majority of the items on the list has been only what the local distributors expected during the summer season. There has been, however, considerable activity shown in the demand for ash and plain oak. The call for cottonwood and gum has also been above the average. There has been considerable hardwood coming in from the producing territory during the past week or two and the local distributors are getting ready for their fall business. It is the opinion of the best informed hardwod distributors that there will be little change for the better in the way of business while the extreme heat continues. Cypress is having a fairly good trade. The demand for it is as good as the distributors expect during the summer season. Orders are coming both from consumers and from line yards, indicating that stocks in the yards are low and need replenishing, and the local distributors therefore look for a brisk trade before the fall business begins.

MILWAUKEE

The prospects are bright, even at this early date, for a fine fall trade in the local hardwood field. Most concerns who are buyers of hardwood seem to be poorly stocked up, as a result of their buying only to meet their present wants, and it is certain that they will be in the market when the fall business begins to loom up. Wholesalers are looking for a more active business about the middle of August.

The crop outlook in this section of the Northwest was never better than at the present time and this seems to be instilling confidence in builders and building operations in Milwaukee have been unusually active this summer.

Local hardwood stocks are light, especially in northern woods, as last year's stuff has been cleaned up and new stocks have been arriving slowly. Local wholesalers say that they expect stocks to be low until fall at least. It is said that stocks at the mills are gradually being rounded into condition and that by the time fall trade opens there ought to be a fairly good assortment to choose from. Maple, birch and basswood seem to be in leading demand just at the present time. Prices are holding firm and are about unchanged.

Quartered Oak Veneer

¶ Our stock is sawed or sliced from genuine Forked-leaf White Oak.

¶ If you call you won't leave without buying as we have the right figure for the most exacting requirements.

¶ Our perfect machinery and supervision make perfect manufacture.

Call or write now and have a good choice

Fred W. Black Lumber Company
Chicago

Take Douglas Park "L" to 40th Ave. and walk one block south

Your Second Setting

Where will it be? Logically where there is a worthwhile supply of timber that can be bought at a fair price and the conversion of which will yield a fair profit.

By far the greatest number of these locations are

In the Great Out West

Others are making selections now. The most desirable tracts go first and are going rapidly. This is the year to get the best of what is left, even though you do not contemplate operating until the last log has passed through the mill you are now running.

We know there are more and better opportunities in the West than in any other section of the country.

Each year many fine tracts of timber pass into the hands of operators and the range of choice becomes more restricted.

Plan to spend your vacation in the West and while out there take a look at some of the bargains we now are offering.

James D. Lacey & Co.

Timber Land Factors

Chicago, Ill., 1750 McCormick Building
Portland, Ore., 1104 Spalding Building
Seattle, Wash., 1009 White Building

WHY?

WHY do more than 380 of the most prominent and successful lumber manufacturers exchange nearly $30,000,000.00 of indemnity against fire loss at

Manufacturing Lumbermen's Underwriters

BECAUSE!

BECAUSE it is the oldest and strongest inter-insurance association among lumbermen, being now in its fifteenth year.

BECAUSE $978,432.40 cash savings have been returned to members.

BECAUSE $856,831.32 cash surplus, owned entirely by the members, has been accumulated.

BECAUSE $2,443,029.00 has been paid in losses under prompt and equitable adjustments without resort to quibbling or technical controversy.

BECAUSE it was the first to settle lumber losses on a market value basis.

BECAUSE the regular, frequent and thorough inspections given the plants of all members help them to prevent fires, thus materially reducing both the fire waste and the cost of indemnity.

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Attorney in Fact,
KANSAS CITY, MO.

Western Representative
HARRY B. CLARK,
Portland, Ore.

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Eight words of ordinary length make one line. Heading counts as two lines.
No display except the headings can be admitted.

Remittances to accompany the order. No extra charges for copies of paper containing the advertisement.

EMPLOYES WANTED

INSPECTOR WANTED

First-class farm wagon manufacturing concern wants experienced, competent inspector for wagon gearing stock—Poles, Axles, Reaches, Bolsters, Eveners, etc. Steady position and good treatment for right man. Must work at home or on road as required. Only man experienced in this line need apply. State fully experience, age, salary expected, etc. Address
"BOX 70," care HARDWOOD RECORD.

WOODS AND MILL CREW

A double band mill in the Upper Peninsula of Michigan which has not been running for several years will be started this summer, cutting hardwood. Only part of mill and woods crew engaged. Permanent work all the year for the right men. State age, experience and wages. Address "BOX 60," care HARDWOOD RECORD.

EMPLOYMENT WANTED

POSITION WANTED

Eastern hardwood sales manager desires position with progressive concern middle west. Address
"SALES MANAGER," care HARDWOOD RECORD.

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.
GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St., Buffalo, N. Y.

LUMBER FOR SALE

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you. Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg., Chicago.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

TIMBER LANDS FOR SALE

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracts of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

FOR SALE—23,000 ACRES

virgin hardwood and hemlock. Located in northern Wisconsin on main line of trunk line R. R. Address
"BOX 69," care HARDWOOD RECORD.

TIMBERLANDS FOR SALE

We have for sale 250,000,000 feet L. L. Y. Pine located in South Miss. Logging conditions first-class; low freight rate to tide water; also a tract of hardwood of 8,000 acres located in North La., which will cut 36,000,000 feet oak, 5,000,000 hickory, 1,000,000 gum and 5,000,000 pine. For further information address
W. J. LOUGHRIDGE,
Whitney Bank Bldg., New Orleans, La.

5,000 ACRES NORTH GEORGIA

hardwood, in fee simple, cutting twenty million feet. Traversed by a railroad. Price and terms attractive. LUTHER ROBERTS,
Gainesville, Georgia.

TIMBER FOR SALE

FOR SALE CHEAP—SIXTY ACRES

of fine timber on Rogue River in Jackson County, Ore. A. M. PEYTON, Owner, Pekin, Ind.

LUMBER WANTED

WANTED—20 CARS

1x4" and wider, good average widths and lengths, high grade No. 2 common cypress, yellow stock preferred. Must be sound knotted type, and free from shake. Quote price rough, also dressed, also band resawn, Pittsburgh rate. Address
"BOX A," care HARDWOOD RECORD.

WANTED—300,000 FEET

1/35" sliced qu. Oak Veneer for column purposes. State lowest price. Address
"BOX 71," care HARDWOOD RECORD.

WANTED—4/4 QUARTERED

White Oak Strips, 2½" to 3½" wide, clear grade, not over ½" bright sap.
CINCINNATI FLOOR CO., Cincinnati, O.

DIMENSION STOCK WANTED

WANTED

DIMENSION OAK

Plain and Quartered

Various sizes for chair and table factories.

Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,

New York.

WANTED

Hard Maple and Beech Squares 42", 44", 48" long, plump 1" x 1". Must be clear and straight. If you have any to offer write us. Will take them dry or green.
THE COLUMBIA MFG. CO.,
New Philadelphia, Ohio.

WANTED—LARGE QUANTITIES

1¼x2x38—40,
1½x2x38—40,
1½x1½x36,
1¼x1¼x40,
1¼x4—20, Oak, Ash or Hickory.
Address "BOX 75," care HARDWOOD RECORD.

WANTED—LARGE QUANTITIES

1½x1½x40,
1¾x1¾x19,
1x2¼x16,
1x3x16.
Address "BOX 77," care HARDWOOD RECORD.

BUSINESS OPPORTUNITIES

ADDITIONAL CAPITAL FURNISHED

or will buy mill operation having own timber. Address "INVESTOR," Box 115, Newark, N. J.

FOR SALE

Large double band sawmill, fully equipped, electrically lighted, plenty power and uptodate in every way. Located in the best oak section in the country, with plenty good timber at low prices. Has been operated with great success. Will sell at a bargain as owner wishes to devote his entire time to another line of business. Address "SAWMILL," care HARDWOOD RECORD.

FOR SALE

Large, fully equipped, well stocked plant, manufacturing store and saloon woodwork, bars, bar fixtures, coolers, workboards and brass goods used in this line. Old established business. Plant in steady operation. Owner has died. Estate wishes to sell. If interested, write
F. T. PEITCH, 54 Wade Bldg., Cleveland, Ohio.

FOR SALE—HARDWOOD MILL

for manufacture implement and wagon wood stock and lumber. Would buy material in part payment. Address

"WOODSTOCK," care HARDWOOD RECORD.

FOR SALE—WOODWORKING PLANT

located on Q. & C. Ry. at Rugby Road, Tenn., in heart of hardwood section, consisting of two-story mill building, brick boiler house, brick kilns, stock sheds, equipped with 150 H. P. boiler and 125 H. P. twin engines, blower system, etc. Everything the best and good as new. 9-acre yard with 980 Ry. frontage. 3 company dwellings. Must be sold to close estate.

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PARTNER WANTED

Must know the planing mill business and invest $5,000 to $8,000 in prosperous southern enterprise. Must assume management, as my extensive lumber interests prevent my taking personal charge of planing mill end of the business. Address

"BOX 68," care HARDWOOD RECORD.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

MACHINERY FOR SALE

HOISTS AND DERRICK IRONS.

for handling logs at mill.

THE NEW ALBANY MFG. CO., New Albany, Ind.

FOR SALE.

A first-class one band sawmill complete, with planing mill and larger burner in connection. All in good condition,—boilers, engines, etc. Will sell machinery on reasonable terms. For further particulars address,

BATCHELOR TIMBER CO., Saginaw, Mich.

FOR SALE

1 Lane Mfg. Co.'s Saw Mill.
1 Defiance Drag Saw.
1 Defiance Double Belt Polishing Machine.
1 Defiance 10′ Bolter.
1 Defiance 24″ Lathe.
1 Berlin Swing Cutoff Saw.
1 Bentel & Margedant Gang Rip.
1 American Cross-cut Saw.
1 American Wood Splitter.
1 Edwards Log Turner.

S. N. BROWN & CO., Dayton, O.

MACHINERY WANTED

WANTED

Veneer lathe about 60 inches; also 16 foot veneer saw. Must be in good condition.

ROBERTS & CONNER CO., New Albany, Ind.

WANTED—HARDWOOD LUMBERMEN—

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on waterproof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

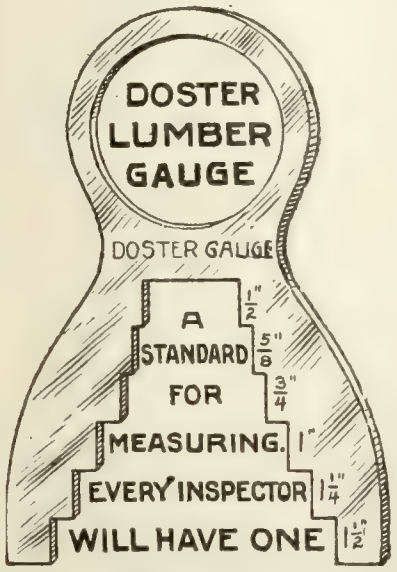
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537 So. Dearborn St., Chicago.

WANTED IMMEDIATELY

second-hand 7 or 8′ complete band mill. Must be good as new. Will buy in parts.

WARREN ROSS LUMBER CO., Jamestown, N. Y.



For sale by HARDWOOD RECORD,
537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

Excellently Located Woodworking Factory

A woodworking factory consisting of a two-story modern brick building, 40x100 feet; a brick boiler and engine house, 30x30 feet, and three frame buildings, dimensions, 40x70 feet, 20x 80 feet, 20x56 feet, with brick dry kiln 18x35 feet and a frame office building 35x36 feet, located in an enterprising northeastern Tennessee county seat town, is offered for sale at an attractive price.

A 100 H. P. Dillon boiler and a 14x 30 Corliss engine furnish the power.

The machinery consists of lathes, reamers, knives, saws, sanders, etc., with all necessary pulleys, belting and shafting equipment. The buildings are steam heated and lighted by electricity.

This factory is adaptable to nearly any kind of wood-working industry and is well located on a railroad siding. This is a very favorable opportunity for one wishing a factory equipped and ready for immediate operations.

Full particulars will be given by referring to file No. 45485 and writing

M. V. RICHARDS
Land and Industrial Agent
SOUTHERN RAILWAY
Room 305, Washington, D. C.

CHICAGO

Osgood & Richardson

935 Peoples Gas Bldg.

NORTHERN AND SOUTHERN HARDWOODS

Chicago Agents: LAMB-I ISH LUMBER CO.

E. H. KLANN LUMBER CO.

Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

819 FISHER BLDG. **HAR. 1187**

Factory Lumber
GRAY'S HARBOR SPRUCE
SOFT YELLOW FIR
WESTERN SOFT PINE
DIRECT MILL REPRESENTATION
E. B. Nettleton 1103 Fisher Building CHICAGO

A Veneer Gauge is the answer to a Veneer User's craving for years. This "Walker Brand" Veneer Gauge is a steel gauge that will satisfy your wants for all time. You can't do yourself a better turn than to buy one of these gauges. It gauges ACCURATELY every thickness from 1-40 inch to ⅝ inch INCLUSIVE. Wake up to this opportunity. Price only $1.98 delivered by U. S. Mail. Order now, today. Address—6456 Woodlawn Ave. Phone Hyde Park 33.

Dept. C BIRD'S EYE WALKER
CHICAGO

COUNTERFEIT CHECKS

are frequent except where our

Two Piece Geometrical Barter Coin

is in use, then imitation isn't possible. Sample if you ask for it.

S. D. CHILDS & CO.
Chicago

We also make Time Checks, Stencils and Log Hammers.



Gerlach Modern Machines
Produce the Cheapest and Best
COOPERAGE STOCK and BOX SHOOKS
Circular, Band and Cylinder Saws
SAW AND LOG TOOLS
THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

If you are not a subscriber to HARDWOOD RECORD and have a suspicion that you would like to see a copy, it is yours for the asking.

American Forest Trees

By Henry H. Gibson **Edited by Hu Maxwell**

"AMERICAN FOREST TREES" is a comprehensive work of more than seven hundred pages, illustrated by more than one hundred full page pictures of forest types of tree growth, and hundreds of minor pictures.

It answers every question worth asking about the infinite variety of forest growth in this country, and the utilization of these woods in lumber and other forms. The opinion of an expert on this work is:

"AMERICAN FOREST TREES" is the foremost contribution that has ever been made to American forest and lumber literature.

The price of this work is Six Dollars ($6.00) net. It will be sent on receipt of price, prepaid, subject to return and refund of payment if it does not prove satisfactory.

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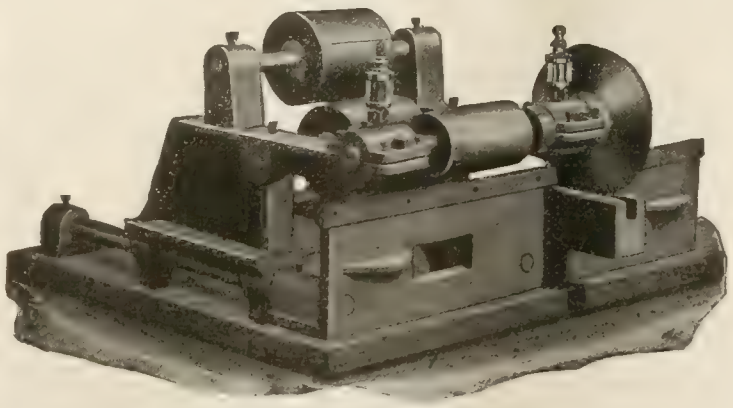
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537 South Dearborn Street **Chicago, Illinois**

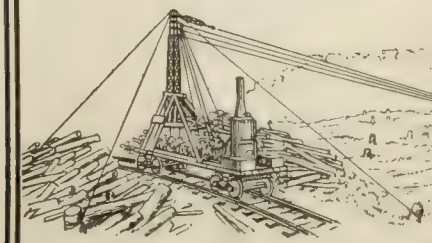


BUTTING SAW
for
Flooring Factories

For cutting out defects and making square and smooth ends for end-matching machines. Used by the largest producers. Write for particulars and prices.

Manufactured by
Cadillac Machine Co.
CADILLAC, MICH.

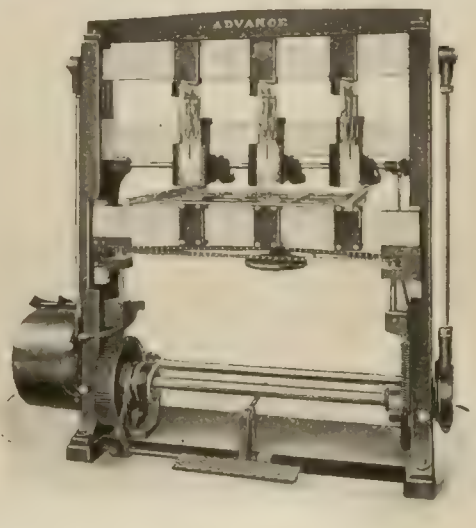
The CHEAPEST HARDWOOD LOGGING
IS DONE WITH
LIDGERWOOD CABLEWAY SKIDDERS



LIDGERWOOD MFG. CO.
96 Liberty Street, New York

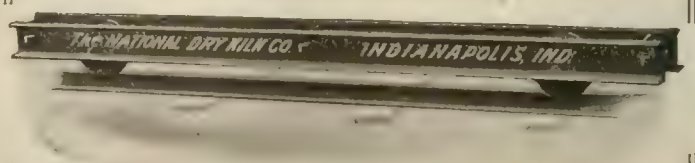
Branch Offices
CHICAGO, SEATTLE
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NEW ORLEANS-WOODWARD, WIGHT & CO. LTD.
CANADA-ALLIS CHALMERS BULLOCK LTD.
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Wire Stitching Machinery



FOR
Crates, Veneer and Resawed Lumber Boxes, Also Wire and Metal Bound Boxes,
FRUIT PACKAGES, BASKETS, FIBER SHIPPING CASES, PAPER BOXES AND SPECIAL PURPOSES
ASK FOR CATALOGUE
Manufactured by
SARANAC MACHINE COMPANY
BENTON HARBOR, MICH., U. S. A.

Kiln Truck



We make all styles of Kiln Trucks, Transfer Cars. They are roller-bearing, steel or malleable iron wheels. We have one contract for 4,500 6½′ trucks.

Always a large stock of material on hand. Can make prompt shipment.

The National Dry Kiln Company
Indianapolis, Indiana



This New CLYDE Overhead Cableway Skidder Saves $74.67 a Day in Labor Alone!!

In an actual test recently conducted on the Smoky Mountains, it cost, **on an average taken over three consecutive weeks,** $14.75 for a day's labor with six men to get 25,725 feet of logs with this new CLYDE, while it cost $89.42 for three and a third days' labor with ten men to get 25,725 feet of logs with a big fifteen thousand dollar machine working under exactly the same conditions.

The difference is $74.67 a day in favor of the new CLYDE OVERHEAD — that's $23,371.71 a year, more than two and a half times the cost of this new machine for mountain logging.

Of course, the first cost of a CLYDE OVERHEAD SKIDDER is low, we admit that—it's less than two-thirds that of the machine it was tried out against.

Let us send you full details of this remarkable showing and of the machine that accomplished it!

CLYDE IRON WORKS

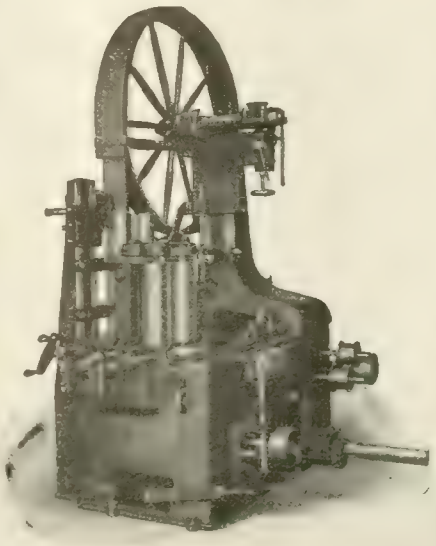
LARGEST MANUFACTURERS
of
PROVENLY EFFICIENT LOGGING MACHINERY IN THE WORLD

"A Machine for EVERY Logging Operation"

Home Office and Factory:
Duluth, Minn., U. S. A.

EFFICIENCY

a Specialty - Not a Side Line



NEW Standard 54-inch Band Resaw

Bethaven, N. C.
Oct. 19, 1912.

Gentlemen:

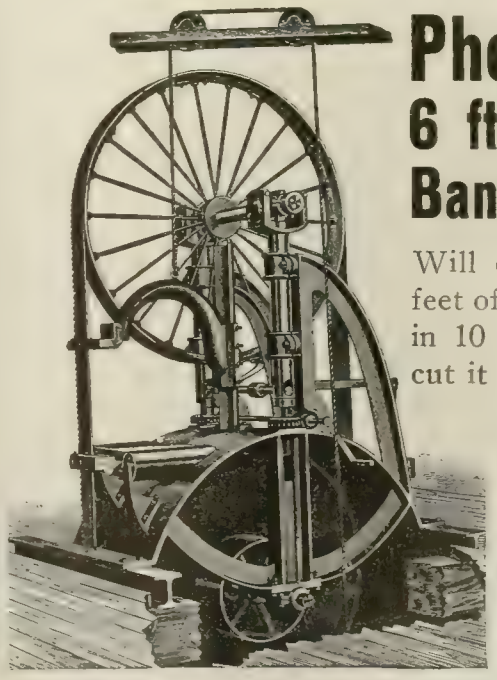
The NEW Standard 54" Band Resaw that we installed some time ago has given us satisfaction, and is at the present time answering in a thought manner the purpose for which it was installed.

Yours truly,

THE INTERSTATE COOPERAGE CO.

Wm. B. Mershon & Co.

SAGINAW MICH.



Phoenix 6 ft. Pony Band Mill

Will cut 30,000 feet of 1" lumber in 10 hours and cut it good.

Nearly 200 of these mills sawing wood in the U. S. A.

PRETTY GOOD RECOMMENDATION, ISN'T IT?

MODERATE PRICE

PHOENIX MFG. CO.

EAU CLAIRE WISCONSIN

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

"SOVEMANCO."

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard. LOUISVILLE, KY. Mills, Magnolia, Standard and 21st Sts.

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co. *Wausau, Wis.*

Custom Mill Work, Storage, Inspection

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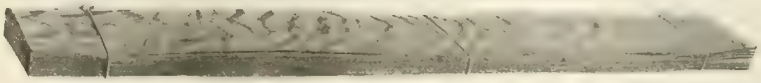
Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co. Long Island City, New York

VENEERS AND PANELS

OUR SPECIALTY
Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.
ROACHDALE, IND.
H. I. CUTSINGER, Gen'l Mgr.

B. C. JARRELL & CO.
MANUFACTURERS OF
High Grade, Rotary-Cut Gum
VENEERS
Cut right; dried right; prices right
HUMBOLDT, - TENNESSEE

CIRCASSIAN
THE REMARKABLY INCREASED POPULARITY OF CIRCASSIAN IN THE UNITED STATES IS SEEN EACH YEAR IN GOVERNMENT REPORTS.
ARE YOU IN A POSITION TO GET YOUR SHARE OF THAT BUSINESS?
BUY WHERE YOU CAN HAVE PICK OF LARGE ASSORTMENT OF HIGH-GRADE WOOD—WHICH WE ARE FEATURING.
Adams & Raymond Veneer Company
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CIRCASSIAN MAHOGANY
Logs VENEERS Lumber
WE IMPORT WE MANUFACTURE
All Thicknesses of Mahogany
Ready for Shipment
RICE VENEER & LUMBER CO.
GRAND RAPIDS, MICH.

Hoffman Brothers Company
Sliced and Sawed, Quartered and Plain Red and White Oak
Walnut Cherry Ash Maple
Let us Send You Our Stock List FORT WAYNE, IND.

"WE ARE GETTING RESULTS"
WRITES ONE ADVERTISER
This Means That He Is Getting
NEW BUSINESS
Through His Ad
If we can do it for him is there any logical reason why we can't for you?
MAKE US PROVE IT
HARDWOOD RECORD, CHICAGO

The Central Veneer Co.
SOFT YELLOW POPLAR
CROSS BANDING
Huntington, West Virginia

WISCONSIN

WHERE THE FINEST NORTHERN HARDWOODS GROW

Scott & Howe Lumber Co. — Medford Lumber Co.

NELS DUEHOLM, Sales Manager

Old National Bank Building — **OSHKOSH, WISCONSIN**

WE HAVE ON HAND

5,500,000 4/4 & THICKER BIRCH
2,600,000 4/4 & THICKER HARD MAPLE

Cut out of the finest lot of logs in the Northwest and manufactured as lumber should be. Try a sample car and you will always be our customer.

MAPLE BIRCH BASSWOOD

DRY STOCK

Ready for Shipment

MAPLE
2″ No. 1 Common & Better

BIRCH
1″ No. 1 Common & Better
1¼″ No. 1 Common & Better
1½″ No. 1 Common & Better

BASSWOOD
1″ No. 1 Common
1¼″ No. 1 Common

Brown Bros. Lumber Co.
Rhinelander, Wis.

WE MANUFACTURE MICHIGAN HARDWOODS AND HEMLOCK. MILLS ELECTRICALLY DRIVEN; STOCK BAND SAWN

Have in Shipping Condition

4/4, 5/4, 6/4 and 8/4 BIRCH also a good stock of Hemlock Dimension & Tamarack Bridge Plank

WILL BE PLEASED TO QUOTE PRICES ON APPLICATION

THE C. A. GOODYEAR LUMBER COMPANY

Office and Mill at TOMAH, WISCONSIN — Logging Camp BLUE BILL, MICHIGAN

Birch Is Our Specialty

All Grades, All Thicknesses

Basswood
Maple
Elm

Oelhafen Lbr. Co.
Tomahawk Wis.

Hardwood Record's

strongest circulation is in the region where things are made of wood—WISCONSIN, MICHIGAN, ILLINOIS, INDIANA, OHIO, PENNSYLVANIA, NEW YORK and the East. **It's the BEST sales medium for hardwood lumber.**

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PROMINENT SOUTHERN MANUFACTURERS

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OAK FLOORING
A GUARANTEE OF PERFECTION

Boice Lumber Co., Inc.
Southern Hardwoods
MAIN OFFICE
RICHMOND, VIRGINIA
Yards: NORFOLK, ABINGDON, GRAHAM, VA., and NORTH WILKESBORO, N. C.

Our Corps of Inspectors
Intelligent! Highly Trained!
Conscientious!
Is assurance that you will get what your order calls for when you buy Gum from us.
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SPECIALTIES
RED GUM, PLAIN OAK
SEND US YOUR INQUIRIES

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Three Mills

Frank Purcell Kansas City U. S. A.
Exporter of Black Walnut Logs
JO MARK
FIGURED WALNUT IN LONG WOOD AND STUMPS

Salt Lick Lumber Co.
SALT LICK . . . . KENTUCKY
MANUFACTURERS OF
Eureka OAK AND BEECH **Oak Flooring**
Complete stock of 3/8" and 13/16" in all standard widths

Carolina Spruce Co.
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Spruce & Hardwood
LUMBER
Mills: Pensacola, N. C. *Capacity* 90,000 ft. per day
Charles K. Parry & Co. Sole Selling Agts. Land Title Bldg. Philadelphia

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FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

Send Us Your Inquiries

The I. Stephenson Company - WELLS, MICHIGAN

"Chief Brand" Maple and Beech Flooring

in 3/8, 1/2 and 13-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING, MICHIGAN

For the Better Kind of Hardwoods

write

EAST JORDAN LUMBER CO.

East Jordan, Mich.

ALL THE MICHIGAN HARDWOODS

Makers of

LATH SHINGLES — **Imperial Brand** MAPLE FLOORING — PINE AND HEMLOCK

FORMAN'S FAMOUS OAK FLOORING

Is made in faultless fashion from the most uniform-colored and even-textured oak produced; worked from Kraetzer-Cured lumber manufactured at our Heidelberg, Ky., sawmills.

Thomas Forman Company

Detroit : : : : : Michigan

Von Platen Lumber Co.

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MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

500 M feet 8/4 No. 2 Com. and Better Dry Maple
400 M feet 6/4 No. 2 Com. and Better Dry Maple
300 M feet 5 4 No. 2 Com. and Better Dry Maple

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

S. L. EASTMAN FLOORING CO.

SAGINAW BRAND

MAPLE FLOORING

SAGINAW, MICH.

HARDWOOD RECORD'S

strongest circulation is in the region where things are made of wood—WISCONSIN, MICHIGAN, ILLINOIS, INDIANA, OHIO, PENNSYLVANIA, NEW YORK and the East.

IT'S the BEST SALES MEDIUM for HARDWOOD LUMBER

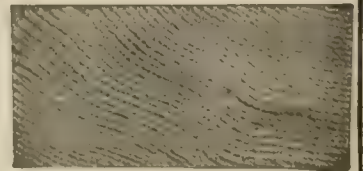


Lumber Dried As Never Before

SEE THE DIFFERENCE

GRAND RAPIDS DRY KILN

GRAND RAPIDS VENEER WKS., SOLE MFRS., MICHIGAN



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The Foremost Hardwood Market of the East

ORSON E. YEAGER
SPECIALTIES
Oak, Ash and Poplar
932 ELK STREET

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HARDWOODS OF ALL KINDS
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Specialties
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Standard Hardwood Lumber Co.
OAK, ASH and CHESTNUT
1075 Clinton Street

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HARDWOODS
White Pine, Yellow Pine, Spruce, Hemlock, Fir, Lumber, Timber, Millwork, Boxes, Maple and Oak Flooring
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BUFFALO HARDWOOD LUMBER CO.
We want to buy for cash
OAK, ASH AND OTHER HARDWOODS
All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.
940 Seneca Street, BUFFALO

Hugh McLean Lumber Co.
OUR SPECIALTY:
QUARTERED WHITE OAK
940 ELK STREET

T. SULLIVAN & CO.
SPECIALTIES:
Gray Elm, Brown Ash
Pacific Coast Fir and Spruce
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The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant, Kitchen & Company

Manufacturers Old-Fashioned Soft Yellow Poplar

5-8 and 4-4 in Wide Stock, Specialty

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

OUR specialty in Poplar, Ash and Maple is cutting to order special thicknesses and widths. Our facilities and high quality of our timber enable us to do this to your entire satisfaction. Thick specialties we can make to your advantage,—High grade Car Sign Boards in Poplar we give special attention to,—

4/4 16″ and wider, high grade Maple No. 1 Common & Better usually in stock,—Three cars ready for shipment now,—And also always have on hand a nice stock of Hemlock Boards in all grades,—

WE SOLICIT THE BUSINESS OF DISCRIMINATING BUYERS FOR ALL HIGH GRADE SMOKY MOUNTAIN HARDWOODS AND HEMLOCK

LITTLE RIVER LUMBER COMPANY **Townsend, Tenn.**

W. H. White Company
Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.
Sales Office: BUFFALO, N. Y.

STOCK DRY — STANDARD GRADES — BEST MANUFACTURE — CAR OR CARGO SHIPMENTS

WE OFFER
All Kinds
OF
Hardwood and Hemlock
Lumber
Hardwood
Flooring, Lath
AND
Dimension Stock

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED
POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD

SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Hardwood Record

Eighteenth Year, Semi-Monthly.

CHICAGO, AUGUST 10, 1913

Subscription $2. Single Copies, 10 Cents.



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Gentlemen:

We sell Lumber, especially Hardwoods.

We manufacture almost all we sell—we are first hands.

Our delivery points are scattered and prompt shipments our aim. Get in touch. We'll do you good.

J. Gibson McIlvain & Co.
1420 Chestnut Street, Philadelphia

ELEPHANT RUBBER BELTING

AIR DRILL AND AIR TOOL HOSE

STEAM WATER SUCTION

EXTRA QUALITY

Recommended for hard service and guaranteed to do the work



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CRANE COMPANY - - ALL BRANCHES
STANDARD EQUIPMENT CO., MOBILE, ALA
ALBANY MILL SUPPLY CO., ALBANY, GA.

THE MECHANICAL RUBBER COMPANY
(Chicago Rubber Works)

307 W. Randolph Street, CHICAGO
ESTABLISHED 1882

Cartier-Holland Lumber Company

DON'T OVERLOOK THIS BET!

We wish to call your attention to the following high grade lumber. Same is in nice shipping condition, and especially adapted for high grade furniture or interior finish work.

30,000′ 4 4 End Dried Winter Cut White Maple
40,000′ 4/4 High Grade No. 1 Common and Better Birch
40,000′ 5/4 High Grade No. 1 Common and Better Birch
100,000′ 4 4 1sts and 2nds Soft Elm
150,000′ 1x4″ Pine Crating Strips S2S
50,000′ 1x4 & Wdr. Pine Crating (85% 6″ & Wider)

WE WOULD APPRECIATE YOUR INQUIRIES

Ludington Michigan

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

BASSWOOD

We Offer for Prompt Shipment

1x4 Clear Strips	150 M.
1x6 Clear Strips	200 M.
1x7 & 8-inch 1s & 2s	25 M.
1x3 No. 1 Common	48 M.
1x5 No. 1 Common	35 M.
1x6 No. 1 Common	162 M.
1x7 & up No. 1 Common	18 M.
4/4 No. 1 Common	34 M.

July 21, 1913

COBBS & MITCHELL, Inc.

Sales Department

CADILLAC MICH.

Mitchell Brothers Co.

Dry Stock List

MICHIGAN HARDWOODS

Cadillac, Mich. July 21, 1913

1x7 & 8 Basswood, 1s & 2s	30 M
1x3 Basswood, Clear	13 M
1x4 Basswood, No. 1 Common	11 M
1x6 Basswood, No. 1 Common (part dry)	19 M
4/4 Birch, 1s & 2s (part dry)	17 M
4/4 Birch, No. 3 Common (part dry)	33 M
4/4 Cadillac Gray Elm 1s & 2s	96 M
4/4 Cadillac Gray Elm, No. 1 Common	100 M
4/4 Cadillac Gray Elm, No. 2 Common	81 M
4/4 Cadillac Gray Elm, No. 3 Common	28 M
4/4 Rock Elm, No. 2 Common & Better	7 M
4/4 Soft Maple No. 2 Com. & Bet. (part dry)	18 M
4/4 Soft Maple, No. 3 Com	4 M
4/4 White Maple, end dried (clear)	1 M
4/4 Birdseye Maple 1s & 2s, end dried	M

CADILLAC QUALITY

When you want lumber of Cadillac Quality, Lumber which has been manufactured and seasoned properly, and grades which have not been blended to meet price competition—send us your inquiries.

WE SELL ONLY MITCHELL'S MAKE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

30,000 ft. 6/4 No. 1 C. & B. Basswood
50,000 ft. 5/4 1st & 2nds Basswood.
75,000 ft. 5/4 No. 2 C. & B. Birch
20,000 ft. 6/4 No. 2 C. & B. Birch
100,000 ft. 6/4 No. 2 C. & B. Beech
40,000 ft. 8/4 No. 2 C. & B. Beech

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



CIRCASSIAN

It costs money to match the usual run of Circassian walnut in paneling because of its inherent defects; hence

If you secure the right figure and widths in clear stock you are just that much ahead, aren't you? We are fortunate in just having secured this rare combination in an especially selected shipment of veneer.

In sincerity we can say that we never saw a closer, richer figure or more completely figured stock. Its clearness and width are astonishing.

ASK US TO GIVE YOU DETAILS

VENEER MANUFACTURERS COMPANY
CHICAGO ILLINOIS

15,000,000 Feet Always On Hand



Our Double Band Mill

Huttig, Ark.

With two mills like this we manufacture 40,000,000 feet of band sawn southern hardwoods annually. We guarantee our lumber to be of excellent widths, full thickness, and to contain 50% to 75% of 14′ and 16′ lengths. We make high grades and all of the "CREAM" is in each grade. Send us your inquiries.

"Wislumbco Standards"

25,000	"	8	4 Log Run Hickory
30,000	"	4	4 x 13" & Wider 1st & 2nd Tupelo
40,000	"	4	4 No. 1 Common Red Gum
50,000	ft.	4	1 1st & 2nd Red Gum
50,000	"	4	4 x 13 to 17" Box Board Sap Gum
50,000	"	4	4 x 13" & Wider 1st & 2nd Sap Gum
50,000	"	6	4 Log Run Soft Maple
60,000	"	4	4 No. 1 Common Cypress
60,000	"	4/4	No. 2 Common Sap Gum
65,000	"	4/4	x 6 to 12" 1st & 2nd Tupelo
75,000	"	4	4 x 13 to 17" Box Board Tupelo
75,000	"	4/4	x 6 to 12" 1st & 2nd Sap Gum
75,000	"	4	4 No. 1 Common Sap Gum
75,000	"	4/4	Shop Cypress
100,000 Pcs.			1¼x1¼ 19" Oak Squares

A good stock of Oak, Gum, Cypress, Cottonwood, Elm and Maple

Wisconsin Lumber Co.
CHICAGO

MILLS
Huttig, Ark.
Deering, Mo.

FLANNER-STEGER LAND & LUMBER CO.

MAPLE AND BIRCH FLOORING

of unexcelled manufacture and quality. Also Manufacturers of Basswood, Birch, Elm, Maple and Hemlock.

SEND US YOUR INQUIRIES

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1704 STEGER BLDG., CHICAGO, ILL.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

J. RAYNER
VENEERED PANELS
ALL WOODS
SEND FOR STOCK LIST
MAHOGANY LUMBER
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CHICAGO

Estabrook-Skeele Lumber Co.
MANUFACTURERS AND DEALERS IN
Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods
In the Market for Round Lots of Hardwood
WRITE US BEFORE SELLING
Fisher Building, . . . CHICAGO
'PHONE HARRISON 1984

EVERYTHING TO A DOOR

The veneers for stiles and rails, 1/8", 3/16" and 1/4".

The veneers for the panel faces, 1/20", 1/16" and 1/8". In Rotary Cut Oak, Quartered Oak, Birch, Yellow Pine, Mahogany, etc. And in Gum, Poplar, Basswood, etc., for centers.

Also 5/16" and 3/8" 3-ply panels, all sizes, in Oak, Birch, Yellow Pine, and Mahogany.

Send us your inquiries

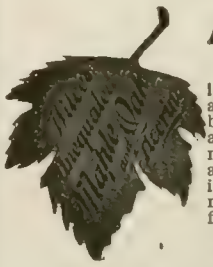
HUDDLESTON-MARSH LUMBER CO.
2254 Lumber Street, Chicago

Ready for Shipment

Ten cars
4/4 No. 1 Common & Better Birch
Five cars
6/4 No. 1 Common & Better Birch
Two cars
8/4 No. 1 Common & Better Birch
Two cars
4/4 No. 2 Common & Better Ash
Three cars
4/4 No. 1 Common & Better Soft Elm
Five cars
4/4 No. 2 Com. & Better Basswood

Above cut from virgin timber. Grade and manufacture are first class.

Mears-Slayton Lumber Co.
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	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	12/4	16/4
Fas Qrtd. White Oak										
Fas Qrtd. White Oak, 10" and up					12,000					
No. 1 Com. Qrtd. White Oak					150,000					
No. 2 Com. Qrtd. White Oak					24,000					
Fas Plain White Oak					150,000		11,100			2,000
No. 1 Com. Plain White Oak			25,000	20,000	200,000	12,000	20,000			
Fas Plain White Oak, 10" and up										
Fas Plain Red Oak			40,000	20,000	200,000	50,000	12,000	6,000		1,000
No. 1 Com. Plain Red Oak			20,000	15,000	136,000	12,000				
Com. & Btr. Qrtd. Red Gum	500,000	400,000	10,000	40,000	600,000	100,000	75,000	60,000	3,000	
Fas Sap Gum, 13"-16"					60,000					
Fas Sap Gum, 18" & up					15,000					
Fas Sap Gum, 6" & up	30,000	25,000	22,000	50,000	115,000	12,000	12,000			
No. 1 Com. Sap Gum, 4" & up			20,000		250,000					
No. 2 Com. Sap Gum, 3" & up	80,000	50,000	20,000		200,000					
Shop & Better Cypress					100,000		200,000	10,000		
Com. & Better Tupelo					100,000					

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80 M 4/4 No. 2 Com. 5" & Wdr. Beech
35 M 4/4 FAS Birch
40 M 4/4 No. 1 Com. 6" & Wdr. Birch
25 M 4/4 No. 2 Com. 6" & Wdr. Birch
55 M 4/4 FAS Soft Elm
40 M 4/4 No. 1 Com. 6" & Wdr. Soft Elm
20 M 4/4 No. 2 Com. 6" & Wdr. Soft Elm
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2 Cars 3/4" 1st & 2nds Sap Gum
4 Cars 4/4" 1st & 2nds Sap Gum, 13" to 15" wide
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1 Car 6/4" 1st & 2nds Sap Gum
2 Cars 5/8" 1st & 2nds Red Gum
1 Car 3/4" 1st & 2nds Red Gum
10 Cars 4/4" 1st & 2nds Red Gum
2 Cars 5/4" No. 1 Common Red Gum
1 Car 5/8" 1st & 2nds Plain Red Oak
3 Cars 3/4" 1st & 2nds Plain Red Oak
4 Cars 4/4" 1st & 2nds Plain Red Oak
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4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23" and 24" and up.
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4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
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Complete stock 5/8" to 4" No. 1 common and better band sawn soft yellow poplar
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1 car 8/4 No. 2 common plain red oak, dry
1 car 8/4 No. 2 common plain white oak, dry
Several cars 6/4 and 8/4 No. 1 common and better hickory, dry
Several cars 4/4 No. 1 common quartered white ash, dry
1 car 4/4 1sts and 2nds ash, dry
1 car 4/4 1sts and 2nds cottonwood, wide stock included, dry

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50,000 feet 4/4 gum boxboards
3 cars 4/4 1sts and 2nds sap gum
3 cars 6/4 1sts and 2nds sap gum
2 cars 4/4 1sts and 2nds plain red gum
2 cars 4/4 1sts and 2nds quartered red gum
2 cars 8/4 No. 1 common hickory
1 car 4/4 common and better buckeye
1 car 4/4x10" and up 1sts and 2nds quartered white oak
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(Mills at Holly Ridge, La.)

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2 cars 8/4 No. 1 common plain white oak
2 cars 4/4 1sts and 2nds poplar
1 car 12/4 No. 2 common poplar

BOOKER-CECIL CO.

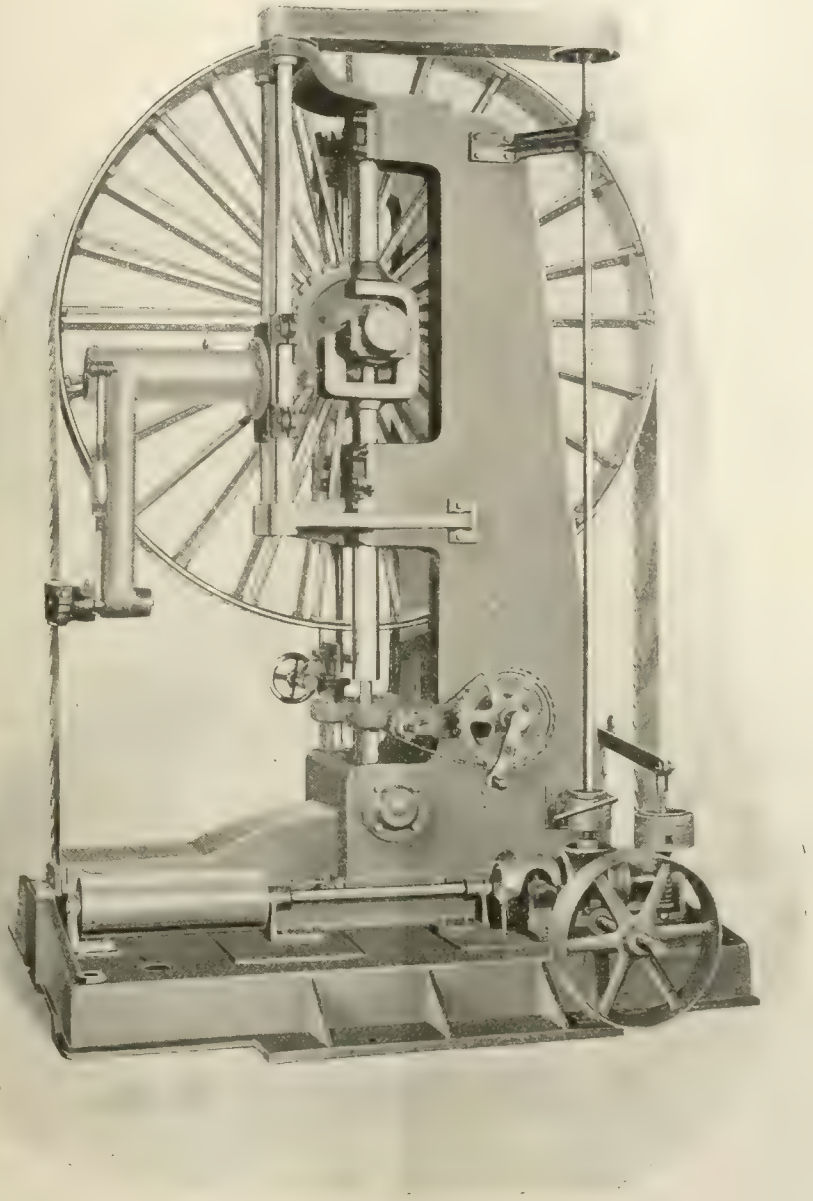
75,000 feet 4/4 1sts and 2nds plain red oak, 40 per cent 14' and 16' long
2 cars 6/4 1sts and 2nds poplar, 80 per cent 14' and 16' long
100,000 feet 4/4 No. 1 common plain red oak
1 car 4/4 1sts and 2nds plain white oak
3 cars 8/4 No. 1 common poplar
4 cars 4/4 No. 1 common poplar

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3 cars 4/4 1sts and 2nds poplar
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2 cars 4/4 1sts and 2nds plain red oak
2 cars 4/4 1sts and 2nds plain white oak
1 car 8/4 1sts and 2nds plain red oak
1 car 4/4 1sts and 2nds quartered white oak
1 car 4/4 1sts and 2nds clear quartered oak strips
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The Newest Hoosier Band Saw Mill

We have been building band mills for thirty-five years and this New Hoosier Band Saw Mill represents the experience of these years.

The simplest mill in construction and the easiest kept in order.

We build this mill in three sizes, 6, 7 and 8 ft. The widest saw the 6 ft. mill will carry is 10″; the 7 and 8 ft. mills will carry 10, 11 or 12″ saws. This mill is built in a substantial manner and embodies all that is latest and best in Band Mill design. The base is of the heavy extension pattern and is so constructed that it does not overhang the foundation but extends completely around the mill. By means of the construction of the column the upper wheel runs in the center of the mill and is supported both above and below the mandrel. The bearings are long and are chain oiling.

The tension device has roller bearings and is very sensitive and durable. The upper guide is raised and lowered by power and is nonbreakable. The lower guide is so arranged that it can be opened quickly. The roll back of the saw is power driven.

The 6 ft. mill will split a 48″ log and lay down a 30″ board between saw and column; the 7 ft. will split a 54″ log and lay down a 36″ board, the 8 ft. will split a 57″ log and lay down a 42″ board.

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Makers of Hoosier Saw Mill Machinery

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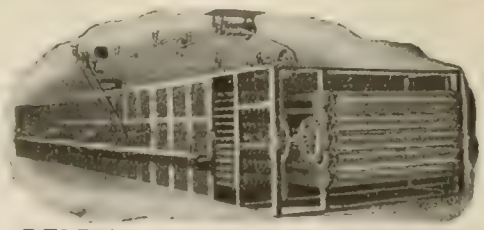
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ICHABOD T. WILLIAMS & SONS

Foreign and Domestic Woods In Logs, Lumber and Veneers

11th Ave. and 25th Street
NEW YORK

910 So. Michigan Avenue
CHICAGO



Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-Working Machinery, on the 10th and 25th of each Month, by

THE HARDWOOD COMPANY

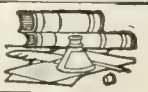
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Review and Outlook



General Market Conditions

SIFTING DOWN REPORTS from various parts of the country covering the state of the trade during the last two weeks, it becomes evident that there is a noticeable tendency on the part of the buying trade to show a more active interest in stock. This report is not unanimous, but is sufficiently so to make its authenticity fairly certain. This change has been more of a moral one than one based on actual increase in number and size of orders, as the buying trade has rather increased its inquiries than its actual purchases. It is argued in some quarters that this increase in inquiries is but an effort on the part of the buyers to feel out the market and get quotations on various lines of stock with the idea of using them to "bear" quotations of other concerns. It is not probable, however, that this is an accurate analysis as, while there are still some concessions on hardwoods in a few points in the country, the general tone of prices shows increasing firmness.

The less optimistic reports come from the more southeasterly hardwood sections, while in the northern hardwood states and in the lower Mississippi valley hardwood producing territories the trade is talking in a much more encouraging vein and, because of the unanimity of such opinions, there is every reason to believe that the beginning of August marked the commencement of a gradual increase in hardwood demand, with commensurate strengthening of prices and perhaps an increased level of prices in certain lines. A favorable indication is seen in reports that the yellow pine situation is improving noticeably and if this is an actual and a permanent fact, the effect cannot help but be beneficial as far as hardwoods are concerned. The markets through the Middle West are showing the greatest activity at present. In this section of the country, the trade reports that it is now receiving a great number of inquiries on all lines of stock and that the actual shipments have kept stocks down to a very satisfactory condition.

In the small towns and cities more or less dependent upon agricultural conditions, the favorable crop reports are certainly having a wide effect in that they stimulate the demand for all kinds of lumber, including lumber for building purposes and more indirectly, lumber for house finishing and house furnishing purposes.

In the larger cities the furniture exhibits have been going on and at the close it was evident that the actual purchase of furniture had been very satisfactory. The result is that furniture factories are entering upon a period of marked activity. In conjunction with this, in the larger markets the furniture exhibits had a marked influence upon the piano trade, inasmuch as a great many of the visitors to those exhibits embraced the opportunity to make their piano purchases which, in the aggregate, were very satisfactory in themselves.

Most of the larger cities, in the Middle West particularly, are planning or are actually engaged in an above normal amount of building which, with the successful settlements of strikes in various centers such as in Chicago, is resulting in an active call for building construction material, with the consequence that the yard trade is in a very optimistic frame of mind.

As to general conditions, the two main barometers of business—the iron and steel industry and the crop reports—are everything that could be desired. The iron and steel mills are in very good shape as far as orders and shipments are concerned, while all reports on general crop conditions are extremely favorable. With these two fundamental business factors in such a condition, any tendency on the part of affairs of the national government to retard business should be offset.

There is one factor to which business men must give increasing attention and that is the gradually increasing realization that perhaps the railroads of the country are not altogether wrong in all the claims that they make regarding the unfavorable condition of their finances resulting from unfavorable legislation and reduction of revenues through decreased freight and passenger rates. Western and southwestern railroads are preparing a desperate appeal for help from the tide of low rate legislation. The recent decisions of the United States Supreme Court upholding rate legislation in Minnesota, Missouri and Arkansas have placed the transportation companies in a condition they never before had experienced. Railroads term the prevailing low tariffs forced on the roads of the West and Southwest as confiscatory, unwise and uncalled for and are preparing to appeal to the Interstate Commerce Commission and to the rate regulating bodies of the various states. Whether the railroads are right or wrong in their contentions, it must be remembered that the power behind them is tremendous and is capable of affecting the business situation of the entire country. Under present more or less unsatisfactory conditions, this fact should be borne in mind and the railroads should not be pressed too closely at bay.

Oak Still in the King Row

THE CARTOON IN THIS ISSUE of HARDWOOD RECORD illustrates the position of oak in the wood-using industries of the country. It occupies the whole king row on the checkerboard, with no sign of a break by which any other wood can get a position in that advanced line, although other woods are ready to move up at the first opportunity. Oak holds and has long held that position because its properties make it a wood suitable for almost innumerable purposes. It is the most generally used wood in this country, though the cuts of pine and of Douglas fir exceed it. Practically every industry that

demands wood of any kind gives the most important place to oak. In the government report by utilization of wood in the single state of Illinois, 473 uses are reported for oak, which is nearly as many as for all other woods combined, and no other single wood approaches it in variety of service. It is superior to changes in fashion, and is little affected by fads and styles. It is substituted for no other wood, but many are worked in as substitutes and imitations of oak, which is the highest compliment that can be paid any wood. Long and extensive demand has lessened the supply, but not the popularity of this material. It holds all of its old friends and constantly wins new ones. The favorite wood of a hundred years ago is the favorite yet.

The Pioneer Basket Maker

THE PICTURE ON THE FRONT COVER of this issue of HARDWOOD RECORD will mean less to the younger members of the present generation than to those whose memories go back many years. The person who forms the principal character of the picture is an old basket maker of the southern ranges of the Appalachian mountains. A century ago the basket factory was unknown in this country. The whole output was hand work, and the article entered little into commerce. Every community made its own baskets just as it made its own shoes. Materials were various, but most baskets then as now were of wood; some of round osiers, others of thin ribbons drawn from tough billets, and commonly called "splits." That was the material of the well known split basket.

During the past thirty or forty years the old fashioned baskets, and the old-style makers, have been passing away, until at this time few remain, while the supply of baskets from factories has increased. A few of the pioneer makers of split baskets yet remain among the Appalachian mountain ranges. They are usually old men or old women who have brought the quaint, rustic art down to the present, and who live in remote settlements where the rush and hurry of modern business methods have made little impression.

The baskets thus made are of different sizes, from a bushel down to a gallon. The thin drawn ribbons are usually of oak, but sometimes of hickory or ash; and the stiffening is secured by small rods, called ribs, carefully interwoven with the splits. In pioneer times the customary price paid for such a basket was as much shelled corn as it would hold. That manner of payment is probably not much used now.

"Cheeking the basket" was the secret of the art which the patriarchs of the trade taught to their children and grand children. That term referred to the basket's characteristic shape. Each side bulged out like inflated cheeks, and the two parts came together forming a valley, as it were, across the bottom, which was shaped not unlike the part of a saddle which fits on the horses's back. In fact, it is probable that the valley across the basket's bottom was originally designed to fit the horse's back so that the load could be easily carried on the animal in front of the rider.

"Basket oak," a well-known and valuable southern species of white oak, "basket ash," the tree usually called black ash, and "basket elm," the cedar elm of the South, are names commemorating the activities of early basket makers.

The Business Horizon

IN VIEW OF THE MANY DISTURBING ELEMENTS in business at this time, it is remarkable that the outlook remains fairly satisfactory. The war in the Balkans dragged on with danger constantly present that the area of hostilities might broaden and seriously affect business conditions in Europe. Mexico continues to drift into anarchy, and no statesman is wise enough to tell when the trouble will decline longer to be confined south of the Rio Grande. The prospect of trouble is constantly present in that direction.

At home the proposed radical changes in the tariff policy and the no less radical innovations in the country's financial system, are widely discussed pro and con; but the country's business refuses to be alarmed. Nobody is afraid that something awful is about to happen. If there is a little dullness in one place, and some hesitation in another, people are willing to wait for conditions to improve, and there is a commendable disposition to help improvements along. There is no more dullness on this side of the sea than on the other. All commercial nations seem to be in the same boat without any disposition anywhere to rock the boat. The mining interests of South Africa passed safely through the crisis due to danger of a strike, and are busy and hopeful again. The danger of a vast railroad strike in this country has happily blown over, and the horizon is clear in that direction. The great activity in railroad building and in the opening of new lands in Canada are proof that our neighbors on that side are busy and hopeful. Nothing serious can be seen in the road ahead of the business interests of this country.

Increase in Use of Low Grades

DURING THE HEARING of the Memphis-New Orleans rate case by the Interstate Commerce Commission at Washington, an interesting point was brought out in regard to the average value of lumber shipped south from Memphis in 1907 and in 1912. It was admitted that the value of some grades had increased, but the railroads were unable to show that the value of an average carload in 1912 was any greater than the average car in 1907. Evidence introduced by shippers showed that the opposite was apparently the case, though the evidence was not wholly conclusive because there was not enough of it. The contention was that low grades are now going to market in much larger amounts than five years ago, and their low value brings down the general average value of carload lots. The specific evidence was that the average price of all lumber sold by a certain firm, which was supposed to be representative, was $32.80 per thousand feet in 1907, and only $29.15 in 1912. The principal woods considered were oak, poplar and gum. Low grades of these woods were practically unsalable in 1907, but have since become popular and are going to market in such large quantities that they seem to lower the average value of shipments, notwithstanding the higher grades have increased in value.

Forest Products Exposition Definitely Organized

IN CONFORMITY WITH THE RESOLUTION adopted at the last meeting of the National Lumber Manufacturers' Association, President Downman appointed a special committee to provide plans for holding the proposed forest products exposition. The committee is composed of representatives of each of the various affiliated associations. In addition, the secretaries of all the associations are appointed auxiliary members of the committee with the same power and authority as the other members.

The first meeting of the committee was held at the Hotel LaSalle on Tuesday, August 5, there being a fair representation of the members present. The entire day and evening were spent in discussing every phase of the proposed exposition and it developed that it would be necessary to form a temporary organization to dispose of the stock. As a result, L. S. Case of St. Paul was elected president of the Forest Products Exposition Company, and J. E. Rhodes of Chicago, secretary-treasurer. Application for articles of incorporation have been made at Springfield, Ill., the company to have a capital stock of $25,000 at fifty dollars per share. The meeting of the stockholders will be held on October 1, when it is proposed to elect the officers and directors of the National Lumber Manufacturers' Association as officers of the Forest Products Exposition Company

The following were appointed an executive committee to work out details, with reference to the incorporation, negotiations with the manager, etc.: L. S. Case, St. Paul, Minn.; George E. Watson, New Orleans, La.; R. S. Kellogg, Wausau, Wis.; George K. Smith, St. Louis, Mo.

While no definite place or date has been set for the holding of the exposition, tentative plans have been submitted to the board of governors, together with the recommendation for the employment of George S. Wood of Chicago as manager.

It is proposed that $2,000 of the capital stock shall be offered for sale to lumber manufacturers and that the remainder shall be offered

to whomever wishes to purchase it. It is hoped to pay six per cent dividend thereon, provided the earnings of the corporation permit.

The holding of an exposition either in Chicago or New York during the coming winter or spring is contemplated, but definite arrangements cannot be made until the enterprise is properly financed for the sale of stock.

Thus this long-talked-of-effort on the part of the manufacturers of the products of American forests to preserve their rightful markets has at last reached a definite basis and it is hoped it will continue as auspiciously as it seems to have begun.

Strong Enough to Walk Alone

A REALIZATION OF THE SPLENDID QUALITIES contained in the wood within the bark of a red gum tree is becoming more and more apparent from year to year. The remarkable success with which the efforts to exploit this beautiful product of the domestic forests have been met is a matter of history and does not need to be reviewed on this occasion. It is unquestionably a fact that where red gum has not been adopted, it is not because it is not known, but rather because, like every known species, it is not adaptable for every conceivable purpose and further because certain users are too strongly wedded to certain other kinds of hardwoods to pass them up for the sake of trying out something with which they are not very familiar. Also, the unhealthy reputation as to warping, checking, twisting, etc., which red gum formerly deserved has had a great deal to do with its consumption and even now is checking its progress to an appreciable degree. But with the employment of the most modern methods of curing red gum, its general use to the extent to which it can be produced is a pretty well assured fact.

Red gum's success can be attributed to its exceptional physical qualities, combined with an entirely pleasing color and a really beautiful grain. Bear this statement in mind. We now come to the real point of this editorial, which is that it is an entirely foolish policy to rob such an excellent wood of the publicity to which it is entitled by reason of the aforementioned virtues and give this publicity to other woods which in themselves are amply able to stand on their own legs. By this it is meant that attempts on the part of numerous manufacturers of furniture and house fittings of various kinds are making a mistake in attempting, and in most cases attempting successfully, to market red gum products as mahogany or Circassian walnut.

Of course in the first instance, it is usually true that the wood does not masquerade as mahogany, but is merely described as having mahogany finish. On the other hand, however, it is a very common sight to see in furniture stores beautiful samples of red gum chiffoniers, bureaus, dressers, etc., in connection with which no effort has been made to give red gum its justly due credit. These lines are almost invariably listed boldly as Circassian walnut.

It is unquestionably true that by so listing their stock, dealers can realize more handsomely from such goods than if the wood were marketed under the name "red gum." On the other hand, the present course is foolish in that the supply of Circassian walnut and mahogany is not so great as it has been and the price of articles made from these two beautiful woods will probably never again attain the former level and will unquestionably rise as the years go by until eventually it demands a price that is prohibitive for a great many home builders. Hence they will turn to the woods which offer a satisfactory appearance at prices more easily within reach. One of these woods is going to be red gum for a good many years to come. Therefore, why not provide now for this future contingency and create in the public mind the most favorable impression possible of manufactured products made from red gum veneer or lumber? Such a course will not only return a better average price for red gum products for all time, but will materially lessen the ultimate cost of marketing such products when they become one of the standards used by the average householder. Of course it can be argued that the dealer is entitled to all he can get out of his immediate sales and, judging from some of the price marks on red gum articles, he is realizing very handsomely. This argument would assuredly hold good wherever such a dealer or manufacturer contemplates retiring from business within the next two or three years, but if he is building his business with the intention to continue indefinitely and to expand, he should consider seriously whether or not red gum should not immediately come into its own and be allowed to walk on its own legs, thus gathering strength for the more serious trials of manhood.

Crops and the Railroads

WHILE THE MAJORITY OF SHIPPERS other than farmers usually find more cause for sorrow than joy in the annual crop movement in the vast farming regions in the West, due to the fact that this contingency requires the movement of most of the freight cars and available cash in the country to that section, the lumber trade at least, can find a measure of satisfaction in the condition this year. Inasmuch as the railroads find themselves not overly equipped with rolling stock to take care of the tremendous grain shipments, they are under the necessity of buying a large amount of lumber for the purpose of repairing such rolling stock as is not now in good condition, and, with carbuilding companies, are mighty busy right now in the construction of new freight cars. Thus, while the old adage "It never rains but it pours" is applicable to this condition, on the other hand, another old saying having to do with an "ill wind" also applies to the present situation.

Steel People Behind This?

THE LATEST AND ONE OF THE MOST SERIOUS ATTACKS on the use of forest products for building purposes is the proposal contained in a drafted revision of the building code of New York City, which is being submitted by the revision committee on that subject. The revision specifies that lumber or wood of any kind is to be eliminated from all buildings over twelve stories high. Its seriousness does not lie entirely in the revision as it stands, but in its serious possibilities to the lumber trade. It is a fact that the modern sky-scraper as it stands today contains but a small percentage of wood in its entire construction but it would seem the natural sequence of the successful culmination of such an effort on the part of wood substitute advocates would be that they endeavor to have passed similar action regarding building construction coming under the twelve-story limit. Of course it is not an absolutely assured fact that such would be the case, but it is the logical conclusion. The present code in New York City permits the use of fireproof wood in the sky-scraper type of building and it is probable that those interested in steel products and other so-called fireproof building materials are even jealous of this concession to wood and are behind the movement to absolutely eliminate this so-called fire danger.

As to the necessity for such a measure, it has been proven in these columns time and time again by actual and specific illustrations that properly installed woodwork is in no way a source of fire danger. It is not necessary to review these arguments as the lumber trade as individuals is probably well posted.

The tremendous import of this proposed revision cannot be too strongly and emphatically urged. It is not a local proposition confined in its interests to the members of the trade operating in New York City, for if New York should adopt such a regulation now it unquestionably would lead not only to the adoption of similar rules for building construction of all kinds, but would be adopted by other large communities all over the country. On the other hand, if by successfully setting forth the arguments in favor of wood the lumber trade can convince the administration of New York City that the passage of such a regulation would work a tremendous injustice, a step of vast importance in combating wood substitutes would be accomplished because of the precedent established.

On the other hand, the actual passage of the revision might possibly have beneficial effects in that it would certainly bring the lumber trade to a realization of the fact that it must go after the question on a broader basis than it has heretofore. Some en

couragement is seen in the fact that the long proposed forest exposition is definitely provided for in the incorporation of the Forest Products Exposition Company under the laws of Illinois. This provides that comprehensive expositions will soon become a fact in several of the larger cities of the country.

This step, however, is broad in its character and will not affect the question immediately under consideration. It is certainly up to some particular element of the lumber trade to nip this proposal in the bud and it would seem that the local association of New York lumbermen, the national association with headquarters in that city, and the National Lumber Manufacturers' Association are the ones in the best position to argue successfully before the New York board of aldermen against the passage of such a regulation. Latest advices indicate that the latter organization is already planning to uphold lumber in this controversy and it is to be hoped that any efforts which it makes will be backed in every possible way by the other national associations and by the lumber trade as individuals. It is sincerely to be hoped that the lumber trade will be well represented at the hearings which it is understood are now going on, regarding the passage of such a bill.

The committee on buildings of the board of aldermen held a meeting on August 5, at which there was brought up for discussion the recommendation giving specifically the places where lumber must be eliminated in large building construction. According to reports, the committee seemed to be disposed to seek a fair solution of the proposition. It arrived at the recommendations submitted after extended investigations and it is anticipated that they will be reported to the full board of aldermen for adoption. The meeting was well attended by lumbermen, more especially by manufacturers of inside trim, flooring, etc.

The National Wholesale Lumber Dealers' Association will present an argument in behalf of the lumbermen in the form of a carefully prepared brief. This association solicits the best ideas of the trade with the hope of obtaining favorable action by the New York City authorities.

Further Indications of Car Shortage

REPORTS ARE CURRENT from various sources of late that the supply of available freight cars is already beginning to be more or less limited because of preparations for shipments of crops both in the North and the South. Various lumber shippers report definite shortage in the available supply of rolling stock and the situation should be well borne in mind and due preparation made to prevent the serious condition which has prevailed in former years because of this condition.

Labor a Factor

THE STATEMENT RECENTLY MADE by one of the biggest lumber manufacturers in the state of Wisconsin to the effect that while he needs five hundred woods and mill workers he is absolutely unable to secure more than seventy-five men at present, is rather startling in its revelation of the practical control which the supply and demand of labor has on manufacturing conditions. If this condition were true all over the lumber belt in the North and South, the much-talked-of curtailment of output would automatically become a fact. As it is, the difficulty is more or less localized, being felt among hardwood manufacturers mainly in upper Michigan and Wisconsin. The reason for this is that those two states are nearer to the crop producing states of the West than any of the other producing territories of the country.

In this connection it is interesting to note a warning published by the trades and labor council of Canada to the effect that there has been a huge increase in the stream of immigration which has flooded the labor market of Canada and especially the western cities, to such an extent that every city of any size has its quota of unemployed. There are more mechanics in Canada today than can ever hope to get employment in their various trades and these will be driven to scramble with the unskilled men for whatever rough work there may be during the summer. A great number of people in the United States appear to have been attracted by the lure of the new Northwest and a vast number of these are hoping to find work at their trades or as ordinary laborers. It is difficult to understand the reason for such a migration from territory absolutely in need of labor to a territory where the laboring element must surely know that the field is already overcrowded. It might be possible to co-operate with the bureau above-mentioned for the purpose of returning to the mill and woods work in the North a great many of the laborers unsuccessfully seeking employment in the Canadian states.

Speaking of the usual indirect effects of the proverbial "ill wind," it seems that the present situation in the copper mining regions of the North, where a general strike of mining employes has been in effect, is of material assistance to woods operators in adjacent territory. The woods superintendent of one of the biggest operators in that region states that his woods force has been considerably augmented and in fact been brought up practically to a full crew by the influx of mine operators who cannot afford enforced idleness and must seek employment, even if temporary in character, in other lines.

A Foolish Attack

AN ARTICLE containing an ill-advised attack on hemlock lumber recently found its way into a number of daily papers. It appears that no trade paper used it, because the unfairness and falsity of the article were too apparent to deceive any one who is in the least acquainted with the properties of the wood. There is no wood in the world so poor as hemlock was represented to be, and that is proof that the author of the article was malicious or ignorant —probably both. That, however, is not the point most open to criticism. Hemlock has stood on its merits a long time, and will continue to do so; but aside from any consideration of that matter, it is poor policy for any person interested in lumber to knock any particular kind of lumber. The substitute people are ever ready to take up and magnify any criticism of wood; and anything that hurts any part of the lumber business hurts the whole trade. One class of wood products cannot gain any permanent advantage by running down another class. One cannot be hurt or helped without hurting or helping all. That is the sentiment which every lumberman should hold and the spirit which he should always exhibit. It is perfectly proper for him to push and advertise the particular commodity in which he is interested, but that can be done without attacking the commodity which his neighbor is handling. Every such attack places ammunition in the hands of the enemies of wood and the ammunition is used in fighting the whole lumber industry. Rivalry among advocates of different woods is stimulating, but hostility is destructive.

False Forest Fire Reports Harmful

THE SUGGESTION was made by the president of the Michigan Hardwood Manufacturers' Association at the meeting held at Detroit, Mich., a short while ago that false reports in the daily press regarding the extent of damage caused by forest fires in Michigan had proven a very serious thing with large stumpage and sawmill owners in that section of the country. It seems that the daily press of the larger cities such as Detroit, recognized the news value of forest fire reports and wired their representatives to secure forest fire news without fail, presumably whether they had to invent the stories or not. As a consequence grossly erroneous figures were given, reporting losses sustained by industrial plants, homes and in the forests themselves. These reports were naturally regarded as truthful just as the average statement made by the daily press is considered so and the natural consequence was that the insurance companies carrying insurance in that section of the country immediately became panic stricken and in many cases straightaway wired their representatives to cancel insurance. As a matter of fact the actual losses did not even approach the figures offered by the newspapers. So far in the calendar year 1913 reports have been issued of many large forest fires throughout Michigan which resulted in an immense amount of property loss. As an actual fact, the total loss as shown in the report in a recent issue of HARDWOOD RECORD covering big timbered districts of the mainland of Michigan aggregated only a little over $3,000.

Pert, Pertinent and Impertinent

How, Indeed?

"They thought more of the Legion of Honor in the time of the first Napoleon than they do now," said a well-known Frenchman. "The emperor one day met an old, one-armed veteran.

"'How did you lose your arm?' he asked.

"'Sire, at Austerlitz.'

"'And were you not decorated?'

"'No, sire.'

"'Then here is my cross for you; I make you chevalier.'

"'Your majesty names me chevalier because I have lost one arm? What would your majesty have done had I lost both arms?'

"'Oh, in that case I should have made you officer of the Legion.'

"Whereupon the old soldier immediately drew his sword and cut off his other arm."

There is no particular reason to doubt this story. The only question is, how did he do it?—*Everybody's Magazine.*

His Preference

"Let's go into this department store until the shower is over."

"I prefer this harness shop," said her husband. "You won't see so many things you want."—*Comic Journal.*

Time to Get Up

General—It's 'af past nine, sir.

Lodger—Good heavens! Why didn't you tell me before?

General—Because it wasn't, sir.—*London Opinion.*

Bluff

"I think she will make a nice wife. I have been calling on her for several months now, and nearly always find her darning one of her father's socks."

"That caught me, too, until I found out that it was always the same sock."

Appropriate Greeting

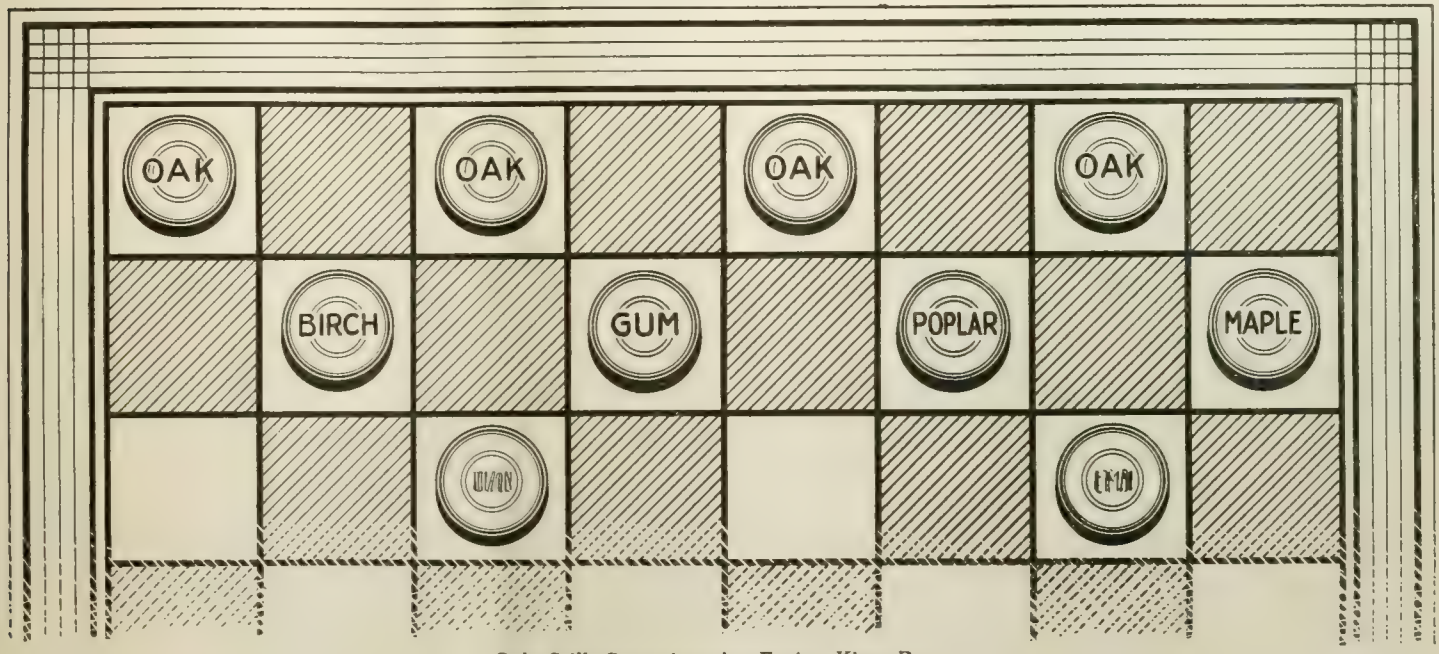
"When I passed Lucy's house yesterday she gave me a salute strictly in keeping with the season."

"What was it?"

"A cool wave."—*Baltimore American.*

Enthusiasm and perseverance are necessary for success. Without enthusiasm perseverance becomes drudgery.

AMERICAN HARDWOODS



Oak Still Occupies the Entire King Row

Her Age

The maiden lady of uncertain age became very indignant when the census taker asked her age.

"Did you see the girls next door?" she asked; "the Hill twins?"

"Certainly," replied the census man.

"And did they tell you their age?"

"Yes."

"Well," she snapped as she shut the door in his face, "I'm just as old as they are!"

"Oh, very well," said the census man to himself, and he wrote down in his book:

Jane Johnson—as old as the Hills.

How He Found It

"So you claim the world is round," sneered the skeptic. "How do you know that it is not square?"

"Because I have had too many dealings with it," grimly replied Columbus.—*Florida Times-Union.*

No Wonder

A wealthy Semitic merchant was visiting in Palestine and, wishing to be taken out on the water where Christ had walked out to meet the disciples, asked of the boatman how much it would cost.

"Twenty-five cents," was the answer.

The merchant was rowed to the middle of the lake and told that that was the place. After looking at the water for awhile, he said he was ready to go back.

"Fifty cents to row you back," said the oarsman.

"What! Fifty cents to get back?" exclaimed the other. "No wonder Jesus walked!"

On a Payroll

"How is our friend Grafton's position on that bill regarded?" asked one member of a legislature.

"Well," replied the other, "the general impression is that his position is a very lucrative one."—*Washington Star.*

Cast-Offs.

A sad story is told by a Pennsylvania man of a lad in his town who, like many another boy, had been obliged to wear the cast-off clothing of his father.

One afternoon this lad was discovered in tears. "What's the trouble, my boy?" asked the man who tells the story.

"Why," explained the youngster, between sobs, "pop has gone and shaved his face clean, and now I s'pose I'll have to wear all them red whiskers."—*Harper's.*

Ace High

A big farmer entered a general store with a jug of 'sky, scribbled his name on a playing card which he inserted into the mouth of the jug, and set the jug in a corner with the remark that he would get it in half an hour. Returning later, he looked for his jug, but could not find it, and the storekeeper knew nothing of it.

"Why, I wrote my name on the ten-spot of clubs and stuck it in the jug," exclaimed the man.

"Oh, I remember now," exclaimed the storekeeper. "A fellow came in here with the ace of clubs and took the ten-spot."

Willie's Question

The aged lady next door had been quite ill, so one morning Willie's mother said to her small son:

"Willie, run over and see how old Mrs. Smith is this morning."

Willie departed, but in a few moments he came running back and said:

"She says it's none of your business."

"Why, Willie!" exclaimed his mother. "What did you ask her?"

'Just what you told me to," said Willie; "I said you wanted to know how old she was."—*Ladies' Home Journal.*

Available Foreign Hardwoods

FIFTH ARTICLE

HARDWOODS OF HAWAII

Editor's Note

Following is the sixth of a series of articles on foreign hardwoods available for use in this country. The first covered hardwoods available in the Central American countries; the second covered hardwoods available in South American countries; the third covered hardwoods of Africa; the fourth covered hardwoods of Ceylon; the fifth covered hardwoods of Burma and India, and the seventh will cover hardwoods of Australia.

The Hawaiian group consists of eight islands, which lie about 2,000 miles southwest of San Francisco. The combined area of the group is nearly that of New Jersey, or about 7,500 square miles. These islands present great varieties of soil and climatic conditions. They are of volcanic origin and very mountainous, their greatest elevation ranging from 4,000 feet on Oahu to 13,760 feet on Hawaii. Most of the rainfall of the islands is confined to the northeast and easy



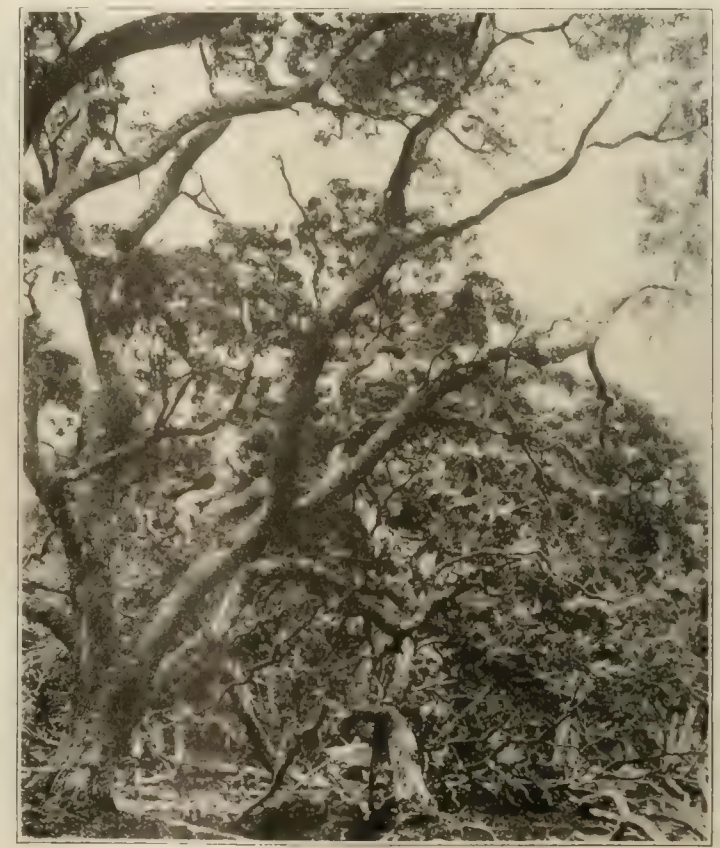
A LARGE ALGOROBA TREE.

mountain slopes, where it is very heavy, amounting often to more than 200 inches annually. On the leeward side of these mountains and on the plains beyond, the rainfall is often insufficient to grow a crop of any kind without irrigation. The forests are largely confined to the rainy side of the mountains and are necessary as a protective cover to keep the ground from washing from the slopes and the rain from rushing back too rapidly into the sea.

About twenty per cent of the islands is at present covered with forests. The value of these forests consists not so much in the trees contained as in the undergrowth beneath them, which holds the water like a sponge. The conservation of the water for purposes of irrigation is an important factor in the islands and a forest cover is imperative. While the forests occupy large areas of land, the valuable woods worth exporting are very few. They furnish a great variety of woods, many of which have considerable value locally for special purposes, but there are only two woods which can be regarded as having a commercial value. These are the koa (*Acacia koa*) and ohia-lehua (*Metrosideros polymorpha*).

Koa, which is now shipped into this country under the name of Hawaiian mahogany, was the ancient royal and sacred wood of the islands. The chiefs were buried in coffins made of the wood of this tree. Forest Service Bulletin 48 states that "Koa is the only fairly abundant tree of the Hawaiian forests which is valuable because of its timber. It is a highly-prized cabinet wood, which has been largely used on the islands and has also been exported in limited quantities. Its color varies through many rich shades of red and brown; its grain is fine and indistinct. Curly koa is especially prized, but is very rare. Most of the koa on Maui has been cut, but an extensive mature forest exists in Hilo and Puna at elevations of from 4,000 to 6,000 feet. This forest is but little known, but seems to contain some magnificent timber and to be in a good state of reproduction. Practically all of the forest is upon accessible government land, and could be utilized to great advantage should the government build a road to it and establish a sawmill for working up the mature trees."

Ohia-lehua is a tree which grows to a maximum diameter of thirty inches and to a height of from forty to sixty feet. Its trunk is straight and clear of branches to near the top. The wood itself is of an olive color, approaching a reddish color near the center of the log. Some of the grades obtained from the old and large logs have the appearance of true mahogany. The wood is considerably harder, heavier, and much finer-grained than that of mahogany. It takes a beautiful polish with a silky luster. In the islands it is often used for interior finish, but as a rule, is employed for rougher purposes, such as packing boxes and dock planks. Ohia has the general appearance of a wood that might be useful for certain grades of furniture, but unless carefully handled it is apt to check in drying and often warps badly, and at one time was considered to be of little commercial use, except for fuel. Formerly the natives of the islands used this wood in the building of their log houses, and more recently it has



A KOA TREE SHOWING THE BRANCHING CHARACTER.

been employed on the island for railroad ties. The wood has also been used for making crosstie plates and insulator pins, and it is quite likely to come into more general use locally and in this country. While there is a good deal of the native timber cut for local consumption, the greater part of the lumber Hawaii uses comes from San Francisco, and Puget Sound. Red fir is the principal timber used on the island. Small quantities of redwood, yellow pine, and cedar

reach the Hawaiian markets, which are always well stocked with material required by the sugar factories throughout the islands.

The mesquite (*Prosopis juliflora*) which was introduced from the United States about seventy-five years ago has become thoroughly naturalized and now forms the principal forest cover along the seacoast. This tree, which is known here as algoroba, serves a dual purpose. It supplies splendid fuel for thousands of families, and the pods are very valuable as food for stock. The tree does not attain sufficient size to become valuable for its timber. The wood is used chiefly for fuel, and sells at the plantations and in Honolulu for $9 or $10 per cord. It lasts well in the ground and is, therefore, used extensively for fence posts.

Citron or yellow sandalwood (*Santalum freycinetianum*) and a closely related species (*Santalum pyrularium*), together furnished the sandalwood of commerce from the Hawaiian Islands. These two species, which are locally known as iliahi, were always cut and sold indiscriminately. These two species form straight, handsome trees, attaining an average height of twenty-five feet and a thickness of about one foot at the base. Other less important species are reported from the Hawaiian Islands, but they are mere shrubs growing along the rocky shores or in inaccessible places. Of these *Santalum haleakalae* is perhaps most abundant, but is commercially unimportant. The natives call all the sandalwoods "lau ala," which means fragrant wood, and they distinguish two different kinds, the "lau keokee" or white sandalwood, and the "lau hulahula" or red sandalwood. The tree itself is called "ilahi" or fire bark.

Sandalwood has played an important part in the history of the Hawaiian kingdom, as it was the first article of export which attracted commerce to the islands and furnished revenue to the government. Attention was first drawn in 1778 to the existence of sandalwood in the Hawaiian Islands, and Captain Kendrick, of a Boston brig, is known to have been the first man who contracted for several cargoes. This marked the beginning of commerce with these islands. Of the magnificent groves that formerly covered parts of the islands only a few isolated trees remained after the first fifty or sixty years of cutting, and in consequence of its extensive exploitation it soon became necessary to prevent the cutting of sandalwood trees. Since then a good many have sprung up again in various localities, but nowhere in sufficient numbers to warrant a revival of the trade. An attempt was made at one time to revive the trade of sandalwood by substituting naihio, or naio (*Myoporum sandwicense*), which is a small tree yielding scented wood, but the spurious kind proved useful only for planes. Efforts are now being made on the new forest reserves of Hawaii to restore the groves of these valuable trees.

The Wrong Uses of Wood

It would seem that there can be no opposition to the idea that the best interests of everyone are conserved by the use of every kind of wood for the purpose to which it is best adapted. Some of the uses of wood are very exacting and only a limited number of kinds—in some instances only one or two—possess the necessary qualifications. Thus for shuttles only dogwood and persimmon are considered good enough; for ax handles, buggy spokes and shafts hickory has no close competitor; for gunstocks black walnut is still a favorite wood; for high-grade handsaw handles nothing is ranked quite as high as apple wood; for tight cooperage white oak holds the field alone.



BLACK LOCUST FENCE POSTS IN PRESTON COUNTY, WEST VIRGINIA, WHICH COULD BE SOLD FOR WAGON HUB MATERIAL.

Some uses of wood demand great strength, others hardness, others toughness, others durability, others lightness and others beauty of figure and grain. There are, however, a considerable number of uses that are not exacting and which can be filled almost as well by one kind of wood as another.

There is not a wood grown but has its uses, though, of course, it is better fitted for some than for others. The haphazard policy of the past has been to employ for any purpose the wood that was most convenient with little reference to its special qualifications. If more care were taken to learn the properties of each species a great many species which are now sold in mixture for general dimension stock and rough lumber would command a substantial price for special purposes. The trend of the present everywhere is to specialize. Why should not this apply to woods? The reason that some kinds of lumber are a drug on the market is that they are suffering from poor reputations, and the latter were secured by the improper use of the material. The problem is to find the particular niche which a certain wood will fill better than some other, and then make the fact so widely known that it will be impossible to think of the one without thinking of the other. The recent success of tupelo, birch and several other woods is due to the publicity that has been given their good features.

One does not have to travel very far to find evidences of waste due to the wrong use of wood. The use of good white oak for crossties is one of the most common and extravagant abuses of our hardwood forests. There was a time when there was some excuse for using such material, but with the increasing difficulty of supplying the demands of the cooper and the possibility of using a large number of cheap woods for ties through the employment of preservatives, such a condition no longer exists. The owner of the timber gets a minimum price for his stumpage. The tie cutter barely makes a living wage and the railroad has to pay more than the material is worth. Not infrequently one hears of hickory and black walnut being used for ties instead of filling the more exacting positions for which they are fitted.

Hickory is also used for various things for which it is not fitted, such as mine props, bridge timbers, fence posts, sills, construction lumber, etc. Almost any other hardwood would fill those requirements better and the hickory would have been left for handles and similar purposes where a strong, tough and resilient material alone would answer. An instance of the extravagant use of valuable wood occurred on a logging operation in the Adirondacks last spring where a straight and sound black cherry tree thirty inches in diameter was used in building a logging road. The illustration in this connection shows a pile of black locust fence posts that should have been cut into hubs or insulator pins, since fence posts in that locality have scarcely enough value to cover the cost of cutting. Similar instances might be cited indefinitely, all emphasizing the importance of a careful study of the properties of woods with a view of employing them most advantageously and economically in situations where the greatest service will be secured. S. J. R.

Transportation of Lumber

THIRD ARTICLE

WHAT IT COSTS

Public carriers of the United States earn a large revenue from the transportation of lumber and other forest products. For the year ending June 30, 1910, according to the latest figures published on the subject by the Interstate Commerce Commission, the railroads of this country transported 67,226,260 tons of lumber and 57,561,905 tons of other forest products. On the basis of four pounds to the foot, these figures may be reduced to 33,613,130,000 feet of lumber and 28,780,952,000 feet of other forest products.

"Other forest products" consist of poles, posts, mine props, crossties, tanbark, pulpwood, fuel, cooperage, sawlogs, and a number of other commodities. The average weight of lumber that goes forward in usual shipments is somewhat under four pounds to the foot, but most of the other "forest products" weigh above four pounds because they are shipped in condition more or less green. This is true particularly of posts, poles, crossties, sawlogs, and pulpwood. By combining the heavy and the light shipments, the average is brought up to 4,000 pounds per 1,000 feet. That is the average found in the census compilations of 1889 when 12,000,000,000 feet were reduced to tons. To be exact, the average of the 12,000,000,000 feet was 4,056 pounds per thousand feet board measure. Railroads generally give the weight of lumber shipments but not the feet, for which reason it is necessary to find a reducing factor which in this case is accepted at four pounds per foot.

The total shipments, not counting any of them except at the point where they originated, amounted to 124,788,160 tons or 62,394,082,000 feet. A large part of this was carried two or more times, that is, the road which first received it carried it part of the way to its destination, and delivered it to another carrier. The total quantity passed from the roads which first received it to some other carriers was 68,472,568 tons, or 34,236,284,000 feet. It is thus seen that a little more than half of the freight of this kind received by railroads at points of origin is carried over two or more roads before it reaches its destination. However, to avoid duplication nothing is counted in the present article except at the originating point.

Published statistics do not show in dollars and cents the total money received by railroads for carrying lumber, but factors are given by which the total may be calculated. It is shown that about fourteen per cent of the revenue of all the railroads in the United States is received for carrying the products of the forests. The total freight revenue for 1910 is given at $1,925,553,036, and it requires but a simple calculation to show that the fourteen per cent of it derived from lumber amounted to $269,577,425.04 for the year. It may thus be shown that the average freight on all lumber carried by railroads of the United States that year was $4.32½ per thousand feet.

It may be of interest to see how this compares with the general average of all freight for that period. The average for all per ton was $1.03992, and the average for all forest products was $2.1625, or more than twice as much.

In order that the averages in cost may be justly compared, the average length of haul of lumber must be ascertained, and then the average haul of the total freight shipments of the country. By elaborate calculations, which need not be explained in detail here, it is found that the average haul of all forest products was 299 miles. The average haul (which is usually called "typical haul") of all freight by railroads in the United States in 1910 was 249.68 miles. The average lumber haul was about twenty per cent more, and the average freight charge on lumber per ton was about one hundred per cent more than the average for all freight shipments.

It should be explained that the low average cost per ton of all freight shipments is largely due to the low rate on products of the mines. The mines furnish 56.23 per cent of all the freight carried by railroads in this country, while forest products furnish only 11.67 per cent. The rate on most products of the mines is much under that of lumber. There is not much variation from year to year in the average length of haul of freight shipments. It is remarkable how little change there is, as is shown as follows:

Year	Typical Freight Haul, Miles
1900	242.73
1901	251.98
1902	239.10
1903	242.35
1904	244.30
1905	237.56
1906	240.89
1907	242.05
1908	253.94
1909	251.10
1910	249.68

The average rates for the eleven years, from 1900 to 1910, both inclusive, show comparatively little change. This will surprise many persons who suppose that changes in rates are the rule rather than the exception. While many changes occur, when the whole of the 240,438 miles of railroad in the United States are considered separately, they counteract one another when all are considered together. In 1910 the car movement was equivalent to hauling one loaded car 12,851,294,922 miles, and one empty 5,498,337,123 miles. The average rates and receipts are shown as follows for eleven years:

Year	Tons, 1 Mile	Rate per Ton per Mile, Cts	Received per Ton, Dollars
1900	141,596,550,161	0.729	0.9753
1901	147,077,136,040	0.750	1.05116
1902	157,289,370,053	0.757	1.03219
1903	173,221,278,993	0.763	1.05158
1904	174,522,089,577	0.780	1.07251
1905	186,463,109,510	0.766	1.03868
1906	215,877,551,241	0.748	1.03594
1907	236,601,390,103	0.759	1.05428
1908	218,381,554,802	0.754	1.07760
1909	218,802,986,929	0.763	1.07563
1910	255,016,910,451	0.753	1.03992

In 1910 the average receipts by railroads for lumber carried in carload lots was 0.734 cents per ton per mile. Other commodities figured on the same basis were: Bituminous coal 0.495, anthracite coal 0.589, grain 0.630, dressed meat 0.904, hay 1.019, live stock 1.217, cotton 1.832.

The figures which show that railroads of the United States in 1910 carried over sixty-two billions feet of forest products might, at first glance, appear inconsistent, because the total lumber cut that year is given in the census report at 40,018,282,000 feet, or some

twenty billion less than what the railroads carried. No inconsistency exists, however. The forty million feet listed by the census was lumber alone, which was less than half of the whole products of the forests that year. Including ties, poles, posts, pulpwood, fuel, and other commodities which did not appear in the lumber cut, the total was about 105 billion feet, or some forty-two billion feet in excess of what the railroads carried.

Some of the country's forest products were shipped by water, though not a large amount. Much was never in the hands of common carriers at all, but was used so near the points of production that deliveries were made by wagons. This was true more particularly of cordwood used as fuel than of any other commodity.

Attempts were not made, in the preparation of this article, to show the extent of water carriage of forest products. Much difficulty would be met with in an attempt to show this accurately for a term of years because statistics for different periods were not compiled on the same basis. The rafting of lumber at certain times and places has been very important; and some would include log drives in statistics of forest products transportation. Others who compile figures on the subject confine their investigations to boats only.

It may be stated generally that the transportation of lumber by water is not so important as it once was, on either lakes or rivers. The reason is that much less timber is now cut near navigable streams than formerly. Operators go so far back to procure timber that it must be brought out by railroads. In 1889 the receipts of lumber and other forest products at all ports on the Great Lakes in the United States was 3,428,628,500 feet. In 1906 it had fallen to 1,883,175,000 feet. In the same year the total movement of lumber on the Mississippi and its tributaries was 225,545,000 feet, and on all other inland waters 226,752,000 feet. The total shipments of lumber on all the inland waters of the United States in 1906 was only two-thirds that on the Great Lakes alone seventeen years before. By 1910 the lake shipments of lumber had fallen off another half billion feet.

It may be of interest to compare the earnings of railroads in carrying different commodities. Sometimes the fact is lost sight of that railroads haul cars as well as the commodities in the cars, and must also haul the empty cars back. It costs as much, weight for weight, to haul cars as the articles in the cars, and in figuring earnings all items must be taken in account. The following table does this with a number of forest products and also with certain other kinds of shipments, and comparisons can be readily made. The figures given show the earnings per mile per ton in cents:

Commodity	Earnings on Commodity Alone, Cents	Earnings on Commodity & Loaded Car, Cents	Earnings on Commodity and Car Both Ways, Cents
Wheat	0.985	0.643	0.594
Dressed Meats	1.141	0.454	0.282
Bituminous coal	0.666	0.450	0.374
Iron ore	0.311	0.205	0.169
Bricks	0.762	0.495	0.457
Agricultural implements	1.491	0.698	0.621
Vehicles	1.498	0.613	0.539
Furniture	1.315	0.501	0.437
Paper pulp	0.798	0.422	0.381
Empty barrels	0.701	0.246	0.214
Lumber and box shooks	0.655	0.379	0.345
Staves and headings	0.526	0.317	0.291
Logs	0.335	0.218	0.162
Ties	0.547	0.343	0.315
Cordwood	1.077	0.996	0.674
Poles, posts, props	1.058	0.675	0.538
Other forest products	0.770	0.419	0.379

The total freight carried by railroads in 1910, including what came from originating points and that received from connecting lines, was 1,849,900,101 tons. That was made up of the following items:

Forest products	193,239,733 tons
Products of agriculture	160,401,693 tons
Animal products	38,624,775 tons
Mines	942,065,847 tons
Manufactures	278,157,500 tons
Merchandise	61,234,757 tons
Miscellaneous	71,600,523 tons
Unassigned	104,575,273 tons
Total	1,849,900,101 tons

The tonnage furnished by the forests is 9.57 per cent of the total carried by railroads. It is 11.67 per cent of freight received at originating points.

Hardwoods Crowd Out Pine

The Department of Agriculture and Immigration of Virginia has published a pamphlet written by W. W. Ashe of the United States Forest Service giving the result of investigations covering the propagation, growth, and utilization of shortleaf yellow pine in that state. Mr. Ashe has worked for years among the forests of the southeastern part of the United States and has published a number of works on the subject. One of the best known of these was published in 1905, "The Southern Appalachian Forests," a book of several hundred pages. His recent report on the Virginia pines deals chiefly with the commercial handling of that timber; but he makes a point which is of general interest—that if left to compete in nature's way, the pines cannot hold the ground indefinitely, but hardwoods will crowd them out and take possession.

When the ground is open, as in the case of old abandoned fields, the pine gets the first start because its winged seeds are thickly sown by wind, and a dense stand of seedling pines is the result. The first forest is, therefore, pine with scarcely anything else; but the oaks, hickories, and other hardwoods slowly prepare to take possession. Squirrels and birds carry the acorns and other heavy seeds into the forest and they germinate in the dense shade of the pines; but the seeds of the pines cannot do that. They will not grow in such a shade, and, in course of time, as the old trees die, the small hardwoods, which may have held their place for fifty years without growing much, push up to the light, grow rapidly, and cast such dense shade that seeds falling from pines can gain no foothold. By that process the pine stand finally dies out and a hardwood forest takes its place.

This agrees with historical evidence. When white men first landed in Virginia they found little pine except on the immediate coast. It was the same in North Carolina. Further back the forests were hardwoods. Pine did not spread inland much until old plantations began to be abandoned, and it then took possession.

It thus appears that pine in that region can spread and can hold its ground only by human help. When nature is given a chance to assert its power, the hardwoods win the fight, and crowd the pine out. This agrees exactly with recent conclusions reached by R. M. Harper in the longleaf pine forests of Alabama. Botanists have long known that, generally speaking, broadleaf trees are stronger than the needleleaf species and when the contest for space is on an equal footing the broadleaf species will prevail. That is why pine, cedars, and cypresses are so often found in swamps, or on sandy tracts, or sterile mountains. They are crowded from the good lands by the hardwoods and retreat to situations where their rivals have not the hardihood to follow.

The studies of Mr. Ashe in Virginia are of great interest when considered from that standpoint. It is shown that occupation of good land by pine is only temporary unless man, or some other agency, assists the weaker species to hold the ground.

Manufacture of Picture Moldings

Enormous quantities of moldings are required to supply the picture frames that adorn the walls of American houses and halls, and the production of this commodity is becoming a distinct industry. Some planing mills now produce little else, while others turn out moldings in connection with other kinds of millwork. All moldings are not made into picture frames. In fact, not half the output is used in that way, but it is not always easy to separate at the mill the portion of the product intended for picture frames and that meant for other uses. Fortunately, it is not necessary to do so except under certain circumstances.

As an industry, the making of miscellaneous moldings is fairly well defined without considering the many purposes for which the different kinds are intended. Though the kinds and uses are numerous, the principal classes are those designed for picture frames; those very similar and intended for advertising frames; interior house finish, particularly that known as picture molding but which is not for the frame itself but is the strip on the walls of rooms from which pictures are suspended; electric wire molding; fancy moldings for decorative purposes; and various other kinds.

The moldings which go into picture and mirror frames may be classed as the finest portion of the output, but there are many kinds, styles, sizes, and patterns of frame molding, some being cheap, plain, and common, others are milled from expensive woods, and finished artistically and with care. There is no limit on sizes—that all depends on the demand and the planing mill's ability to meet the demand. Some molding is less than an inch wide, others may be nearly a foot, but extra wide moldings are not usual. It is easier to build up a border or a frame by combining narrow pieces than to provide wide, solid moldings. Besides, the wide one-piece work is more apt to give trouble after it is finished. It may warp or check.

There is little more standard for thickness than for width. Thickness must vary greatly where kinds and uses are so numerous. Common thicknesses for the lumber of which moldings are made are 3/4, 4/4 and 5/4 inches. Special thicknesses have as wide a range as special widths.

No complete statistics have been compiled to show the amount and kinds of wood demanded by manufacturers of molding in this country; but figures have been collected which cover certain parts of the country, and these may be considered as representing fairly well the industry in the whole country. The table which is given below summarizes a year's operations of forty manufacturers of picture frame moldings in Missouri, Illinois, and Michigan, and includes practically all manufacturers in those three states who turn out that commodity. The different woods used, the amount of each, and the cost of each are shown, and also the totals:

Woods Used Yearly in Forty Factories Making Picture Frame Moldings

Kind of Wood	Feet, B. M.	Cost of Lumber at Factory
Basswood	14,309,000	$ 485,108
White oak	6,755,755	283,809
Red gum	6,039,290	149,700
Red oak	3,956,000	146,355
White pine	3,867,300	77,489
Longleaf pine	3,095,000	84,950
Birch	2,084,000	57,474
Shortleaf pine	1,148,000	30,709
Chestnut	709,000	26,319
Norway pine	600,000	19,000
Post oak	150,000	5,625
Cypress	145,000	5,935
Black ash	110,000	4,240
Yellow poplar	104,313	3,111
White ash	67,745	2,416
Mahogany	66,500	8,485
White or gray elm	43,000	1,360
Black walnut	31,514	2,405
Sycamore	30,000	875
Sugar maple	13,000	500
Cherry	10,000	350
Hickory	10,000	500
Rosewood	1,670	500
Ebony	1,330	560
Snakewood	1,250	719
Cocuswood	1,000	275
Circassian walnut	1,000	410
Red maple	500	16
Total	43,351,167	$1,399,195

The total of 43,351,167 feet shown in the foregoing table is made up of 34,495,867 feet of hardwoods (broadleaf trees) and 8,855,300 feet of softwoods (needleleaf trees). The average cost of the hardwoods at the factory is $34.24 per thousand feet, and the softwoods $24.63. These figures, it should be understood, are based on factory reports in the three states named, and some of them will be too low or too high if applied on the Pacific coast, or in New England, or in Louisiana. They apply in the Middle West, that is, in Michigan, Illinois, and Missouri. This is a softwood and hardwood region combined. Both kinds of lumber are convenient, and manufacturers of moldings can procure what suits them best. In round numbers, four-fifths of the wood used in the manufacture of these moldings in the three states is hardwood, and one-fifth is softwood. The softwoods are pine and cypress; all others shown in the table are hardwoods. It is apparent that the picture molding business draws supplies principally from the hardwood forests of the country. It is probable that a similar showing would be made if statistics were compiled in New England or in the extreme South; but on the Pacific coast the softwoods likely would predominate, for the reason that the region has very little hardwood.

Basswood is a clear leader of all the woods demanded by the makers of picture frame moldings. This extensive use is not accidental, nor is it due to cheapness, but the wood is demanded because of its special fitness for the particular place it must fill. It has an even, regular grain. The fibers lie in one direction and do not cross one another or form pits, burls, or curls. That is an important property in a wood intended for fine moldings. In passing through the machine the surface is cut in grooves and elevations in order to produce the patterns required, and the knives are set accordingly. If the wood is not even-grained, the knives are liable to tear the surface in places, instead of cutting it smoothly, and the moldings will be rough and their value lowered.

An examination of the accompanying table will reveal the fact that maple occupies a very subordinate place. Only 13,000 feet are listed—not one foot a thousand of basswood. The reason for this is not that maple is inferior to basswood for general purposes—it is an excellent wood, and for many uses ranks above basswood, but it does not do so as a material for picture frame moldings—but that maple "pulls" when run through the machines which cut it in the desired patterns. The term "pull" is used to denote the tendency of a wood to dress rough. After the knives have passed over it, the surface is apt to show minute pits where small pieces of wood were pulled out by the knives. These may be very small, but when present they are a defect in otherwise fine moldings. The natural grain of maple is wavy, or at least irregular. The bird's-eye effect is frequently present. It is a beautiful surface when well polished, but the knives of a molding machine are liable to render it rough. When such a surface is finished in oils and stains, the small depressions are accentuated and constitute a defect.

Some manufacturers of picture moldings offer the same objection to birch, but the objection is evidently less serious, judging by the comparative quantities of the two woods entering the molding industry. Much more birch than maple is used.

White and red oaks are popular and reliable woods for picture moldings. They have always been in demand, and will be as long as picture frames are made. The finish of such frames is nearly always natural; that is, it shows the grain of the oak. The wood is not concealed beneath gilt, paint, or plaster as is customary when some other woods are made into frames.

Among the woods in the table, other than oak, which are frequently finished in the natural grain when made into frames, are chestnut,

ash, mahogany, walnut, sycamore, cherry, rosewood, ebony, snakewood, and cocuswood. They may be treated with fillers to develop grain figure, but nothing is to be gained in concealing the natural appearance of the wood under plaster or gilt.

Red gum is rapidly taking its place as a leading wood in the manufacture of picture frame moldings. It stands third in the accompanying table, and some people predict that in a few years it will stand first in the picture frame industry. It possesses most of the desired properties. It was formerly objected to on account of its slow seasoning qualities, but a better understanding of the wood's characteristics has removed most of these objections. It has been found that if the wood is subjected to a treatment of superheated steam, the seasoning troubles largely disappear. The behavior of red gum while passing through woodworking machines is all that could be desired. It can be made smooth enough for finish in the natural grain, or it may be covered with gilt, enamel, plaster or paint. It stands well—that is, it does not shrink, swell, or warp under the usual atmospheric changes. This is a very important consideration in selecting woods for picture frames. A little warping and shrinking will pull the joints apart and may crack the enamel or blister the gilt or other finish.

About twenty per cent of the wood used by manufacturers of picture frame moldings in the three states listed, is pine, consisting of white pine, yellow pine, and Norway. These woods commonly go into frames of the cheaper sort, and they are often other than picture frames, though placed in that class. Pine frames are largely used for advertising matter, such as is found in hotel lobbies, barber shops, railroad depots, street cars, and similar places. Some of the frames are ten feet square, others are less than one foot; but large quantities of wood are demanded for their manufacture. They constitute the cheapest and commonest output of the molding mill, while the material for mirror frames, and those for fine portraits and oil paintings are the best and most expensive.

The makers of certain kinds of moldings select as far as possible woods possessing the desired properties. Some expensive picture frames are covered with gold leaf. It is laid on and is rubbed until it adheres and presents a smooth surface; or it may be necessary to give the gold an embossed appearance. Much depends on the wood on which the gold is laid, and the manufacturer will procure the kind which promises best results. He may not need much, but no compromise will be made in quality. Other frames are finished in enamel, and experience shows that woods differ greatly in the facility with which they hold enamel. Though maple is often unsatisfactory for frames of natural finish, it is excellent for enameled work.

Many frames are ornamented with composition work resembling carvings. This does not properly belong to the molding industry, though closely associated with it. Such ornaments are fastened on the frames with glue or with small nails. Other ornaments may be of wood cut out with scroll saws, or they may be carvings executed by machinery or by hand. They often add much to the appearance of the finished frame, and to that extent they may be considered to belong to the industry which produces picture molding.

The Revised Newlands River Bill

On July 14 an important bill was introduced in the United States Senate by Senator Newlands. It is a revision and enlargement of the bill introduced by him in April, 1911, and reintroduced with amendments in March of this year.

The measure is as near national in its scope as it is possible to make it, and its primary purpose is river improvement and flood regulation; but a number of matters are included which heretofore have been considered separately or not considered at all. The aim evidently is to do away with the spoils system in river improvements, commonly known as the "pork barrel." Under that system appropriations were handed around in accordance with the pull of politicians and often without much regard for the actual needs of the rivers to be improved. It was a common saying that with a sufficient pull an appropriation could be procured for river improvement wherever "the ground is the least bit damp."

The proposed bill aims to sweep the spoils system away at one stroke, and to enlarge the field so that work that ought to be done can be done at the proper place and in the right way. The politicians will have little to say in the matter; but plans will be drawn by specialists and scientific men, and approval or rejection will be in the hands of boards whose members will have no interest in local politics or in sectional questions.

The bill provides for an appropriation of $60,000,000 a year for ten years. If Congress fails to make the appropriations the president is authorized to raise the money by selling bonds at not more than three per cent, to run not more than thirty years.

The most striking feature of the measure is that it recognizes the fact, which scientists recognized long ago, that the regulation of floods and of stream flow should begin at the sources of the streams, not their mouths. The regulation should, of course, include the lower reaches of rivers; that is, it properly embraces the whole stream, with all its branches, and the entire drainage basin. Congress has been slow to take this broad view, but the thinking men of the country, and that includes the leaders among business men, have understood the question for years. Congress now seems to be about to adopt the same view and to attack the great conservation problems in a new place—the right place.

The bill expressly guards against any attempt to spend the money in one region to the neglect of other regions. It is clearly stated that each region shall have its share; and the beauty of it is that the country is divided into regions, not according to politics, population, power, or pull, but according to physical geography which recognizes commerce but no politics, resources but not votes. The appropriation for each year shall be apportioned as follows:

The Atlantic and Eastern Gulf States get $10,000,000 a year.
The Ohio Valley gets $10,000,000.
The Mississippi above St. Louis—including neighboring streams flowing into the Great Lakes or Canada—$5,000,000 a year.
The Mississippi below St. Louis gets $10,000,000 yearly.
The Missouri river, and the streams flowing into the Mississippi below St. Louis from the West, or directly into the Gulf of Mexico west of the mouths of the Mississippi, $10,000,000.
The Colorado river and the great region which it drains, will receive $5,000,000 yearly.
The Columbia river and its tributaries receive $5,000,000.
The rivers of California which flow to the Pacific ocean get $5,000,000 yearly.

This omits no important region of the United States, for the bill expressly stipulates that a river includes all its tributaries to their fountain streams, and all the lands drained by the streams. That is a highly important recognition. Heretofore when river appropriations have been made the interpretation has been that the expenditure should go to the lower reaches of the streams—they were not supposed to have any head streams or water sheds. If the present bill passes, that view will become ancient history. Of course, the lower streams will be cared for, but the whole appropriation will not be spent there. Control will begin at the heads of rivers, and some attention there will render less control necessary lower down. Boards of health attack the causes of disease instead of waiting for diseases to gain headway. That is the method proposed for rivers.

A list of the forces which the bill proposes to enlist in this work shows the scope. Among the powerful organizations which will be set to work will be the War Department with its engineers; the Department of Agriculture with the trained men of the Forest Service, and the Bureau of Plant Industry; the Smithsonian Institute with its investigators and scholars who will give advice on special problems; the Geological Survey with its vast accumulation of information regarding drainage basins, stream gradients, slopes, contours, the flow of streams, and other hydrographic data; the Reclamation Service with its stores of knowledge concerning both irrigation and drainage.

It would no avail much to call in all of these forces unless they were put to work. They are not for consultation alone. They are expected to lay out the work, and if it is approved, the work falls to them to do. Most of the funds provided are expended in ways specifically stated. The War Department spends $20,000,000 of the appropriation yearly—one-third of it in constructing embankments, levees, dykes, opening and deepening channels, building reservoirs, storage basins, artificial lakes, and other engineering works of that kind. This part will be under the direct control of the chief of army engineers, and the whole corps of engineers will be his assistants.

It should be specifically noted that the reservoir system for water storage is included in the provisions of the bill. That attacks the floods at their source by holding some of the water back. It is provided that the development of water power must be promoted; also that in time of low water the stored supplies in the up-stream reservoirs shall be sent down to keep an even stage, as nearly as possible, in the navigable stretches of the rivers.

The monopoly of the engineering work is not allotted to the army engineers. The Reclamation Service receives $20,000,000 a year, and this will be expended in building works for both irrigation and drainage. Most of the irrigation will naturally lie toward the sources of the streams, but the drainage will be lower down. Much of the water stored in reservoirs constructed by army engineers will be used to irrigate land under management of Reclamation Service engineers. To a large extent the two departments will work hand in hand, yet separate forces will be at work.

The Smithsonian Institute is allotted $1,000,000 a year and expends the sum in collecting data from this and other countries that will be valuable in executing the general plans.

The Bureau of Plant Industry will receive $6,000,000 a year. The chief function of this bureau will consist in finding ways and means of getting the greatest possible benefit for the resources made available by the engineering works of the War Department and Reclamation Service. This bureau has long been engaged in valuable studies of food and forage plants, and of soils and situations. The value of similar investigations in the past can hardly be calculated. It is proposed to continue them, in a wider field, in order to take advantage of opportunities that will be opened for the first time.

The Geological Survey's part of the appropriation is $3,000,000 a year. This will be expended, in part, in stream measurements, and by that means both the Army Engineers and those belonging to the Reclamation Service will be greatly assisted in their work.

The Forest Service is allotted $10,000,000 a year. Half of this is for purchase of lands needed for the protection of the courses of rivers. It is understood that purchases of this kind will be confined chiefly to regions east of the Mississippi river, but the proposed bill does not specify that it shall be expended in the East. The remaining $5,000,000 a year allotted to the Forest Service will be expended in fire protection, tree planting, and in co-operating with states which appropriate money for such work.

The underlying principal of the plan is that all shall work together. There will be no duplication of work, no conflict of authority. The scope embraces the entire United States. It is not a scheme that can be completed in a few years. No one knows how long it will take, but whatever is done will be permanent. All resources will be used. Rivers which have always flowed unused to the sea will be developed to their highest efficiency for irrigation, waterpower and navigation. Every practical means will be employed to prevent soil erosion by which the lower reaches of the rivers have heretofore been silted up. That in itself will go far toward curing the flood evil. Storage reservoirs near the sources of rivers, forest and crop cover for the slopes and bottom lands, and levees and deepened channels lower down, will ultimately reduce the flood damage as low as it can be done by the ingenuity of man.

The machinery for carrying on the work is provided in this bill. The supervising power and authority will lie in a waterways commission. This commission will consist of the President of the United States, who will be chairman of the commission with power to veto; the secretaries of War, Agriculture and the Interior; chairman of the Board of River Regulation; chairman of the Interstate Commerce Commission, and chairman of the Panama Canal Commission.

The Board of River Regulation will be the active working body. It will consist of the chief of engineers, U. S. Army; chairman of the Mississippi River Commission; director of the United States Geological Survey; director of the Reclamation Service; the forester of the Agricultural Department; chief of the Bureau of Plant Industry; the secretary of the Smithsonian Institution; one civil engineer, one sanitary engineer, one hydroelectric engineer, one expert in transportation, and a chairman of the board. The last five shall be appointed by the President of the United States and hold office at his pleasure.

Alaska's Timber Resources

In 1909 R. S. Kellogg was sent to Alaska by the United States Forest Service to prepare a report on its timber resources. After traveling several thousand miles in various parts of the region, and consulting various reports prepared by other investigators, he summed up the situation by saying that the forested area in Alaska covered about 100,000,000 acres, or 27 per cent of the territory. About one-fifth of the area which is classed as forest land contains saw timber, and that on the other four-fifths is valuable principally as fuel, on account of its small size.

There are, of course, patches of good timber and poor interspersed over various regions, but the chief stands of saw timber are in the southern or southeastern part of the territory. The aggregate stand in that region has been very roughly estimated at 75,000,000,000 feet. The best of this timber lies in the Tongas and Chugach National forests, which contain 26,761,626 acres. The land in these forests is largely wooded with much fine timber.

The interior of the territory is forested along the valleys and low hills. Trees are usually small, but often large quantities of cordwood are cut. Sometimes the amount runs as high as twenty cords per acre. Practically the only fuel used in the interior of Alaska is wood, and the demand is rapidly depleting the supply in the vicinity of camps. Forest fires consume ten trees for every one cut and put to use, but this applies only in the interior where the climate is dry. The heavy forests near the coast have been little damaged by fire because the ground litter never becomes dry enough to burn.

Trees of the interior forests are generally too small for lumber. They range from three inches to a foot in diameter and from thirty to sixty feet high. In favored localities larger trees occur, in the interior valleys. The principal species there are white spruce, white birch, balsam poplar, black cottonwood, aspen, black spruce, and tamarack. White spruce is the most important species of the interior and supplies most of the saw timber, and is also much used for fuel. White birch is extremely abundant. This is not the white birch of New England and the Lake States, but an Alaskan species which is very similar.

The valuable timber is in the southeastern part of Alaska. The forests are an extension of those of Washington and British Columbia and partake of their character. The rainfall is heavy and the growth is rank. The principal species are Sitka spruce, western hemlock and western red cedar. There are a number of other trees of some importance. Twenty per cent of the stand is Sitka spruce, seventy-five per cent western hemlock, and the remaining small part is made up of western red cedar and other species.

The spruce is the largest species of that region. Trees occur which are six feet in diameter and 150 feet high. Averages of three feet hold good over considerable areas. Large rafts of logs which average three feet at the butt and twenty inches at the top and over seventy feet long, go to the mills.

Western red cedar averages three or four feet in diameter, and western hemlock is a little smaller. The forests are over-mature. Trees are from 200 to 600 years old.

About twenty-five sawmills are at work in Alaska and their average cut is about a million feet a year each. Thus far the output has been chiefly spruce. The mills supply local demand in their immediate regions. Much of the lumber is made into salmon cases. It costs approximately twenty dollars a thousand feet when delivered at the box factories.



Profits from Paper Birch



A serious defect in the wood of paper birch is that known as "red heart," which materially reduces the quality, strength and value of the wood and renders it unfit for spool, shoe peg or toothpick stock of the higher grades; its presence in large quantities means heavy loss. Red heart is not a disease, but is simply the natural heartwood which forms as the trees grow old. The age at which it appears varies greatly and is considerably influenced by the locality of growth. In favorable places trees that have grown from seed are usually five or six inches in diameter and upward of fifty years old before heartwood begins to form. Trees that originated as sprouts from stumps begin to develop red heart before they are five inches through.

After heartwood begins to form it continues to increase in diameter, at first at about the same rate the tree grows, but later more rapidly. Mature trees usually have from two to four inches of sapwood near the base. The higher one goes up the bole of the tree the smaller the heart becomes, until it disappears completely in the upper part. This is, of course, due to the fact that the lower part of the tree is so much older than the upper.

When red heart first appears it is sound and it may remain so for many years, or again it may begin to decay very soon. In an average stand at maturity it is estimated that from 10 to 15 per cent of the trees are affected by heart rot, and in cases where the trees are past their prime the proportion increases very rapidly. It is this tendency of the heart to unsoundness that is largely responsible for the belief that all of it is deficient in strength and brittle, though, of course, the chief objection to it is the color.

Red heart is by far the largest item of waste in factories which make handles and novelties from paper birch, and not much attention has been paid to the possible utilization of such stock until quite recently. It has been found, though, that sound red heart can be turned into handles and novelties and handles which are to be enameled, since in this case the color is no longer an objection. Some of it is turned into boxes and other cheap turnery, such as cork caps, spools, handles and numerous other articles. It is also employed to some extent for cheap toothpicks, shoe shanks, dowels, package handles, toys, and bushings.

The state forester of Minnesota, in a recent report, calls attention to the large amounts of paper birch that are going to waste in that state for lack of proper utilization. He says: "To the man who has seen the close utilization of birch in Maine and the New England states in general it seems almost criminal to permit the appalling destruction of this splendid wood throughout the timbered regions of northern Minnesota. Manufacturers of spools, rollers, clothes pins, shoe pegs, toothpicks, toys, woodenware, flooring and veneer are paying fancy prices for the poorest grade of birch gleaned from the woods of Maine and New Hampshire. Moreover, they are transporting it long distances and are running short of material. For such manufacturing concerns Minnesota offers an attractive and profitable field. There is no good reason why we shouldn't have dozens of factories utilizing birch and giving employment to large numbers of men right here in our own state."

There is one portion of the paper birch for which there is very little use, and that is the bark. Of course, it is employed to some extent for fancy articles, such as baskets, picture frames, and numerous other odds-and-ends, but all told the amount thus employed is very small. It was formerly employed by the Indians for canoes, but a birch-bark canoe is somewhat of a novelty nowadays. A suggested use is for the tipping of cigarettes.

The tipping of cigarettes with cork has come into general practice during the last few years. Ten years ago only gold tips were ordinarily seen, but they are no longer common. Straw, artificial cork, thin veneers of wood and even corn husks have been tried, but none gives the satisfaction of cork. Most cigarettes are untipped, but there seems to be an increasing demand for the other kind. The making of cork paper requires the finest grade of cork, which is very expensive. It is cut by rotary knives into thin sheets about five-hundredths of an inch in thickness. It is then pasted onto a paper backing, cut into ribbons half an inch wide, and rolled on reels ready for the automatic tipping machines. The amount of cork paper used last year to tip cigarettes would, if spread out in a single layer, cover almost a square mile of territory, and was worth over half a million dollars.

Everyone is familiar with the peculiar laminated bark which gives the paper birch its name and has noted how the layers can be separated from each other by proper care, leaving thin sheets of flesh-colored or whitish bark. These sheets are very soft, pliable and smooth, except for the short, horizontal lines of lenticels. Being composed largely of cork cells, the layers are waterproof and should prove an excellent substitute for cork paper for tipping cigarettes. The chief difficulty is to devise some practical means of separating the bark into layers at a reasonable cost. Although numerous experiments have been tried, none has proved successful.

In India and Africa the bark of a great many trees is used for a multitude of purposes, and in nearly every case the primitive method of beating the bark is employed to get it into proper condition. This could not be done to birch bark, but it is possible that some device could be arranged for passing the bark between heavy rollers, with the idea of loosening the layers by crushing the connecting cells. As grown on the tree the outer layers of the bark are slightly longer than the inner on account of the greater circumference, and rolling flat or backward would tend to make the layers slip past each other. Boiling and steaming, both with saturated and superheated steam, have been tried, as well as a combined treatment of steam pressure and vacuum, but the only result apparently was the darkening of the bark and ruining it for the purpose intended. If someone could hit upon a plan, he will open a good market for a product which now is valueless.

R. J. S.

Traffic Matters Around Memphis

Lumbermen here who have extended timberland holdings and other interests in Arkansas have won a victory over the Frisco System which sought to advance rates on hardwood shipments from points on its lines in Arkansas and Missouri to destinations in Iowa, Nebraska, Minnesota and the Dakotas, from one to two cents per hundred pounds. The hearing in this case was held at St. Louis before one of the examiners for the Interstate Commerce Commission and was attended by J. H. Townshend, general manager of the Southern Hardwood Traffic Bureau, and several prominent members of that body, including F. E. Gary of the Baker Lumber Company, and representatives of the Three States Lumber Company, Lee Wilson & Co. and the Chapman Dewey Lumber Company. The railroad withdrew its increased tariffs after the presentation of the testimony of the bureau and did not let the case come to a decision.

The report that the advance in rates to New Orleans from Memphis, amounting to two cents per hundred pounds, had been suspended until Sept. 30 by the Interstate Commerce Commission was an error. Such a report reached here from Washington, but the Southern Hardwood Traffic Bureau has been officially advised that the advance is held up only three weeks from Aug. 20 or until Sept. 10.

The Southern Hardwood Traffic Bureau has, on behalf of the Tschudy Lumber Company and the A. B. Nickey & Sons Lumber Company, filed a petition with the Interstate Commerce Commission asking for lower rates on shipments of lumber and logs over the Missouri & North Arkansas Railroad to Memphis. It is pointed out that there is a great deal of timber along this road that is susceptible of easy development if a lower rate on log shipments to this city is granted.



The Wooden Bridge



Iron and concrete have become common material for bridges, but the wooden bridge still has friends. At a recent convention of railroad builders in Canada, the statement was made, and was not disputed, that under certain conditions a wooden bridge is more serviceable than iron, and can be kept in repair more cheaply. Such a bridge is supposed to be constructed of timbers treated with chemicals to hinder decay.

An iron bridge must be kept thoroughly painted or it will quickly deteriorate through the attack of rust. Experiences of county authorities with small rural bridges show that an unpainted iron structure, particularly when it is of light construction, may fail sooner than one of unpainted wood. Repairs are much harder to make in metal than in wood. An ordinary carpenter can do the latter, but power drills, riveting machines, and skilled labor of a particular kind are required to splice a beam or set a brace in an iron bridge. The statement, therefore, seems reasonable that the maintenance of wooden bridges may be cheaper than that of iron bridges.

Long service can be expected of treated wood, kept well painted. It cannot be stated just how many years such a bridge will last, because the use of treated timber in work of that kind does not go back many decades, and experiences cannot be quoted; but bridges built in the old way, not treated, but occasionally painted, have stood long periods—longer, perhaps, than any iron bridge neglected in the same way, would last.

When Virginia built what was known as the "Northwestern Pike," from Winchester to the Ohio river at Parkersburg, a distance of about 300 miles, every stream was spanned by a wooden bridge. The work was done between 1833 and 1838. It was said at that time to be "the best bridged road in America," and that "a pedestrian could travel the whole distance without wetting the soles of his shoes." Many turbulent mountain rivers were crossed. Railroads were just coming into existence, and Virginia statesmen—with a strange lack of foresight—expected to make the Northwestern Pike the great commercial highway between the East and the West, the successful rival of any railroad that might be built. No expense was spared. A famous French engineer who had built roads for Napoleon was secured to superintend the location and construction of the highway across the Alleghany mountains. He did his work well, including the numerous bridges, on stone piers, but otherwise wholly of wood except nails and a few iron rods. In many places locust pins were substituted for nails and rods, so that the bridges were as nearly all wood as that built over the Rhine by Caesar.

All of the bridges on the Northwestern Pike were roofed with shingles, weatherboarded, and painted. Even the small ones spanning creeks a few yards across, were protected against the weather with shingles and paint. Up to the Civil war the bridges remained in excellent condition, but the contending armies used the road from the opening of hostilities until peace was restored, and bridge after bridge was burned by one side or the other until few were left. By some chance one of the largest of the bridges escaped the torch, though Union and Confederate detachments chased one another across it many a time during the four years of hostilities. On one occasion a Confederate cavalryman sat three hours at the end of the bridge, a box of matches in one hand and his bridle rein in the other, waiting for the prearranged signal from a distant hill to set the bridge on fire. The officer who was to give the signal was unable to reach the designated hill on account of a raking fire from Yankee sharpshooters, and thus the bridge escaped burning.

The bridge spans the stream yet, after seventy-six years of service. It is situated on Cheat river, five miles south of Rowlesburg, W. Va. It is a quaint and venerable structure, a monument to the lasting properties of wood as a bridge material. The old pike which Virginia statesmen vainly hoped to make the "Nation's highway between the East and the West," is only a common country road now, and carries no commerce; neither do through travelers pass that way. The old bridge seems good for many years yet. Napoleon's engineer planned well when he designed the "four-arched bridge." It is a two-span, double track structure, about 300 feet long, and built largely of white pine and yellow poplar. It is said to have been painted only twice in seventy-six years. Many steel bridges now span streams in the surrounding region, and some of them, not half as old as the wooden bridge, and painted oftener, are in poorer condition, while others have been replaced by new ones, while the old wooden structure serves on decade after decade.



Handling the Credit Bugaboo



Credit is, or should be, based on confidence. It is impossible to confide in those regarding whom one has no knowledge. Therefore the intelligent extension of credit should be based on facts and information sufficiently detailed to enable the lumberman to form a just estimate of the concern with which he is doing business.

This is fundamental. Apparently no business man, particularly one dealing in as large items as those represented by a carload of lumber, would care to assume the risk involved in selling without due circumspection as to credit conditions. Yet it is probably true that lumbermen, as a class, are more careless in this respect than any other set of merchants in the country.

Some dealers not only sell without investigation, but even knowingly assume risks of this character in order to put the business on the books. Having a big stock on hand seems to scare the average lumberman a great deal more than the prospect of ultimate bankruptcy if such methods as those referred to are pursued to their logical conclusion. Occasionally a dealer refers humorously to taking a chance with a lame duck, but defends himself by explaining that it was an item that he was long on, or that he would make a good margin on it if he got his money, etc., etc. With this sort of policy in force, it is no wonder that credit losses pile up to an extent for which there is little justification.

Most lumbermen, also, hesitate to ask their customers for information regarding their financial status to which they have a perfect right. Instead, they endeavor to pick up casual information on the outside, which, while good in its way, is seldom conclusive or convincing. If this were reinforced with a statement of some kind which would give the seller a chance to figure out where the consumer stood, it would have much more value than it has under ordinary conditions.

The lumberman should remember, when he ships out a car of quartered oak, for example, that he is in effect lending the purchaser the money represented by the oak. He is performing the function of a banker, because as soon as the lumber is not paid for he is depending on the credit of the buyer—the confidence he, the seller, has in the user—for his money. And that not only shows the absolute necessity of definite information on the subject of credit conditions which surround each concern, but emphasizes the truth that the lumberman has a moral right to ask and require the information which the bank gets as a matter of course.

If a lumberman went to a bank to ask for credit, supposing he has not dealt there before, he would have to give the banker some pretty detailed figures before he got his money. The banker would have to know how long the concern had been in business, its capital, the

amount of business it did, and the condition of the business at that time. He would have to know how much money had been borrowed previously, and for what it was to be used. The banker is required by law to ascertain much information of this kind, and for his own protection he gets a great deal of it; and while no lumberman would want to go into as great detail regarding his customer's business as he has when he confronts the banker, asking for credit, it certainly seems that he should have no hesitancy in seeking answers to at least a few leading questions of that kind.

He ought to be able to get a financial statement, when he wants it, from concerns which have not established themselves as sound. New accounts being opened should be handled carefully along this line, for then is the proper time to ask and get the data which should be at hand. It is not necessary to ruffle the feelings or the temper of the man at the other end of the line; but a tactful and courteous letter, explaining that the lumber company makes a rule of acquiring this information in opening new accounts, would be certain in most cases to elicit the information promptly and cheerfully.

To show the laxity which prevails among lumbermen as to credit matters, an automobile concern recently started up in a middle western city. The concern had been organized with a great blare of trumpets and much newspaper advertising, for the purpose of stock selling, and business men who had watched its progress were not any too sure of its chances for success. It prepared to begin business, however, and ordered enough lumber to enable a good many cars to be made up.

At the same time it placed a contract with a large concern dealing in iron and steel, axles, springs, and the like, for supplies of this character. The latter concern took the contract, but stated that it would not be able to extend credit until the manufacturer gave a satisfactory financial statement. This the automobile concern was evidently not in a position to do, for it delayed complying with this requirement for several months. Meanwhile it received some material which had been shipped with the understanding that a draft would be attached to bill of lading. All the steel it got was paid for in cash.

A few months later the company was flat broke. A receiver took hold of it, wound up its affairs and sold its possessions, realizing little more than enough to pay twenty-five per cent of creditors' claims. The lumbermen who had taken orders for stock had in every instance shipped the material, and consequently were stung to the extent of seventy-five per cent of their invoices, while the steel people didn't lose a red cent. It is just a question of practice, of course, and it might just as well have been the other way round. As long as a consumer can get lumber without having to give up any information of value concerning himself, the chances are that he will say very little about his financial status.

Some lumbermen are willing to be guided in this respect entirely by statements of their salesmen. If the latter write that the firms from which they have taken orders are all right, and can be trusted, the lumber is shipped. This may work out satisfactorily if the salesman is of a judicial turn of mind, and regards the interests of his employer closely; but it is human nature for the salesman to be prejudiced in favor of his customer, especially if he has landed an order in the face of sharp competition. His report, therefore, should be taken with the proverbial grain of salt, not because the salesman is intentionally trying to deceive his house, but because he is likely to be misled by his own enthusiasm.

In this connection a leading hardwood man believes that it pays him to spend a good deal of time on the road with his men, not so much to help them sell, though this happens, of course; but because he can see things from the credit angle that his road man never looks for. The salesman is hunting for opportunities to get business; while the credit man, though he may create business occasionally, has the disagreeable job for the most part of being at best a negative factor. Hence the buoyant, enthusiastic salesman, pushing hard for orders, is likely to overlook the small details that are of value in making up the credit proposition, and to concentrate on the hard problem of making the buyer want his lumber.

The head of the house is able to look about a bit, gets a line on the business of the concern, the way it is running, the number of employes, the amount of stock carried, etc., and when he leaves he has a pretty vivid mental picture which will enable him to form an accurate judgment of the concern when he is called upon to pass judgment upon it. The salesman who is working the same list of customers most of the time, of course, and is selling them fairly regularly, is not likely to turn in a bad risk, but close supervision of this kind is nevertheless extremely helpful.

Local lumber organizations ought to play up strong the work of exchanging credit information. Their members can discuss matters of this kind in sufficient detail to enable everybody to get a much better line on questionable accounts than in any other way, and there is no danger of any embarrassment such as lumbermen sometimes fear when asked to contribute to a symposium of credit information being made up upon a given concern.

In the latter connection, however, a well-known western lumberman said not long ago that he believes the work being done by one or two lumber organizations along credit lines is invaluable, and should be encouraged by every member who is called upon to assist in getting a line on a concern about which information has been asked.

"I make a point," he said, "of filling out inquiries about every concern with which I have ever had dealings, and in the same way I profit by getting reports on houses regarding which I am in doubt. It doesn't take long to get these reports up, and the experience of each concern reporting on the buyer in question is quoted exactly, so that the inquirer can easily make up his mind regarding him. Every lumberman who wants to protect his accounts should take pains to do what he can do to disseminate information of this character."

Commerce Commission Reports on Railroad Weights

The Interstate Commerce Commission's investigation of reported discrepancies and irregularities in the weighing of railroad freight of various kinds has been fully reported in previous issues of HARDWOOD RECORD. The commission made an exhaustive investigation of the complaints of various shippers and has just handed down its report, in which it is declared that a majority of the track scales now in use should at once be rebuilt in order to obtain reasonably accurate results. The report also embodies sharp criticism of the methods of weighing grain, coal, lumber and similar products, it being alleged that shippers almost invariably get the worst of the transaction. While it is probably true that railroads are not the offenders as frequently and as flagrantly as they are supposed to be, still in this case there is no doubt that their methods are open to the sharpest criticism. It is to be hoped that the report of the Interstate Commerce Commission will result in their changing not only the actual scales but their methods of weighing. No action will be taken until later in the year.

—G. D. C., Jr.

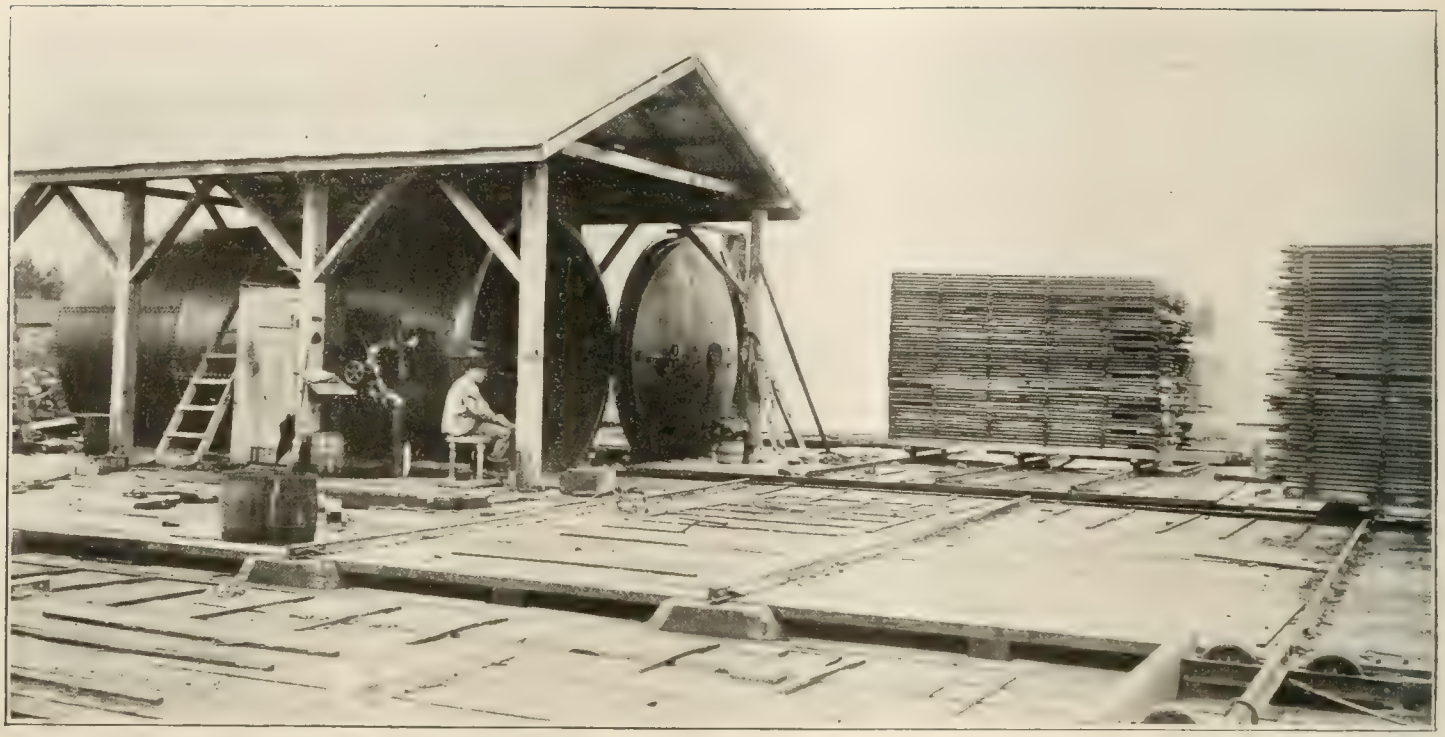
Car Surplus and Shortage

Bulletin No. 149, issued by the American Railway Association, gives the statement of freight car surplus and shortage up to Aug. 1. The total surplus on that date was 67,716 cars as against a surplus on July 15 of 76,280 cars. The surplus Aug. 1, 1912, was 65,904 cars. Total shortage on Aug. 1, 1913, was 11,261 cars and on July 15 was 6,875 cars. The shortage on Aug. 1, 1912, was 9,394 cars.

Thus it can be seen that a suggestion of a serious car shortage is based on actual facts.

Recipe for a modern log wagon—Cross a motor truck with a traction engine to get the wheels and then trade the mules off for their value in gasoline.

The frankly cheerful salesman is one who generally gets his full share of the orders going, and while he is about it he has a much better time and makes many more friends than the grouch or the man with a whine. You needn't attach a moral to this—just take it as a plain fact.



KRAETZER WOOD STEAMING PREPARATOR AT PLANT OF SALINE RIVER HARDWOOD COMPANY, PINE BLUFF, ARK.

Scientific Lumber Production

It is held as a general proposition that in all chief commercial pursuits, lumber production is conducted on a less scientific basis and with less efficiency than nearly any other line. Outside of the introduction of the band saw, in lieu of the circular, and steam skidding and loading apparatus in place of the live stock employed at an earlier date, there has been comparatively little improvement in methods of logging, lumber manufacture, handling and sales methods for many years.

To produce lumber on an absolutely scientific basis is a matter of extreme difficulty, and is practically impossible from the fact that no two forest areas and not even two trees are alike. Every new logging operation is a new proposition, and individual methods have to be employed in each to attain the best results. There is, however, a possibility of securing an approximation of scientific results in lumber manufacture, handling and seasoning after the logs are delivered to railroad or mill, and it is to this end that the Saline River Hardwood Company, Pine Bluff, Ark., has made a serious attempt in its recently completed equipment.

The Saline River Hardwood Company is an allied house of that foremost long and short leaf yellow pine manufacturing institution, the Long-Bell Lumber Company of Kansas City, Mo. For years this company, among other operations, has manufactured a large quantity of short leaf pine through its Arkansas Short Leaf Lumber Company's plant at Pine Bluff, and the new mill of the Saline River Hardwood Company adjoins this institution, and the logging operations of both from the woods to the mills are carried on jointly.

It was the aim of the principals of this great house in starting in hardwood manufacture to secure the very best possible hardwood



GENERAL OFFICE SALINE RIVER HARDWOOD COMPANY, PINE BLUFF, ARK.



FITZGIBBONS & KREBS' LOG HANDLING DERRICK EMPLOYED AT SAWMILL.



FINE FLOORING PLANT IN WHICH THE FORKED-LEAF OAK BRAND IS PRODUCED.



THE FIREPROOF DRY KILNS OF THE SALINE RIVER HARDWOOD COMPANY, PINE BLUFF, ARK.

manufacturing plant, and to build an equipment that was in advance of any other in existence, aiming to produce from its splendid virgin hardwood forest a superior lumber and hardwood flooring product.

Primarily it secured the services of Howard W. Coles as general manager and gave him *carte blanche* to build the best plant for hardwood manufacture in existence. Mr. Coles has had a long and varied experience in hardwood and hardwood flooring production, and has acquired a reputation in this line second to that of no man in the country.

The new mill which Mr. Coles has constructed is equipped with a heavy Filer & Stowell band and band resaw, and all the most modern labor-saving devices. The mill has a capacity of from 50,000 to 60,000 feet of lumber daily. The logs are handled from the cars into immense rollways by the aid of the Fitzgibbons & Krebs elevating traveling derrick.

The company has an extensive hardwood area of which nearly eighty per cent is genuine forked-leaf white oak of the highest type, the remainder consisting of an excellent quality of red oak, red gum and ash. The logs are of medium size, with small, tight heart, and are remarkably sound.

From the sorting chains the assorted lumber is delivered to dollies, and there transferred to a series of platforms interlaced with transfer tracks, on which the lumber is piled onto dry-kiln trucks. This series of platforms and tracks provides for the loading of 100 trucks of lumber of various kinds, grades and thicknesses at one time. These load units, of about 3,000 feet each, are then forwarded to a Kraetzer preparator, a steam cylinder heretofore described in these columns, in which the lumber is treated with steam under pressure. This Kraetzer-curing of lumber insures quick and accurate seasoning, and eliminates all possibility of seasoning defects, stick-marking, stain, checks and splits. The units are drawn from the steaming cylinder and forwarded on their trucks to an extensive system of storage tracks, from the far end of which the seasoned lumber is either loaded onto cars for shipment or still farther advanced through a dry kiln to take out the remainder three or four per cent moisture required, and then delivered by a chain transfer to the oak flooring plant just completed.

The entire system is one in which, after the log is in the mill, the resultant lumber product is handled entirely on wheels until it is loaded onto cars either in the form of lumber or flooring. It is fully believed that the new plant of the Saline River Hardwood Company will develop a lesser cost showing in lumber manufacture and handling than any other hardwood plant in the country, and beyond that it is equally certain that its product is of such a remarkably high type that it will command the trade of discriminating buyers.

Let it be noted that here is a hardwood plant producing well towards 1,500,000 feet of lumber a month that has no lumber yard *per se*, and that the total necessary holding of stock in its storage yard, carrying lumber on wheels, is only about one month's cut, because the lumber is then ready for sale and shipment, or ready to be forwarded to the flooring plant.

A score or more of other institutions are handling a part of their lumber output in this way, but this is the first one to completely eliminate the old-fashioned lumber yard with its costly and constantly decaying lumber foundations, alley planking, and tremendous cost and waste in pile roofing and stickers. The item of piling sticks alone, between carrying 2,000,000 feet and 10,000,000 feet of lumber in stock at one time, is no inconsiderable factor in cost.

This plant has been in operation less than three months, and Manager Coles is now shipping forked-leaf white oak of full thickness, without seasoning defects, six weeks from the saw, at less than four pounds weight, which is a reduction of more than one-third in weight in the time named, and less weight than can be secured on untreated oak eight months on sticks.

The dry-kiln capacity of the plant is only of moderate size, because



GENERAL VIEW OF PREPARATOR LOADING PLATFORM, WITH PREPARATOR IN DISTANCE



DETAIL OF SAWMILL, POWER HOUSE, SORTING SHED AND CORNER OF PREPARATOR LOADING TRACKS.

the stock, by reason of the Kraetzer cured process, is so well seasoned as to require but a minimum of dry-kilning to render it suitable for immediate use for flooring, interior finish, furniture and kindred employment.

The new and adjoining flooring plant just completed by the company is equipped with the very newest type of woodworking machinery and labor-saving devices. It may be noted that the S. A. Woods Machine Company's flooring machines are employed, and the newest type of end-matchers, produced by D. M. Rose of Knoxville, Tenn., used. These end-matching machines are the largest and heaviest ever manufactured for this purpose, and insure absolute accuracy in end-matching. It goes without saying that the Woods type of flooring machines are unexcelled by any other produced.

The company, as well as Mr. Coles, are to be congratulated on this model hardwood lumber and flooring manufacturing plant, which beyond question stands for the highest efficiency in hardwood production that has ever been attained, and beyond that gets lumber production down to an approximation of scientific accuracy in results.

The pictures with which this article is accompanied are self-explanatory and require no specific reference in the text.

Manufacture of Musical Instruments

The Bureau of the Census has issued figures showing the extent of the musical instrument industry in this country in 1909, together with the value of materials used and the number of persons employed.

There has been a steady increase in the number and value of both upright and grand pianos manufactured since 1899. Of the total number of pianos reported in 1909, 97.7 per cent were uprights. Of their total value, that of the uprights represented 93.2 per cent. The total production of pianos of both kinds reported in 1909 was 374,154, valued at $59,501,225, an increase in number of 203,143, or 118.8 per cent, and in value of $32,498,373, or 120.4 per cent, over the totals for 1899. Upright pianos show the greater percentage of increase in number, but grand pianos show the greater percentage of increase in value. New York and Illinois were two of the principal states in the manufacture of upright pianos at each of the three last censuses. In 1909 the number reported for these two states combined (244,994) formed 67 per cent of the total for the United States. In the manufacture of grand pianos, New York and Massachusetts were the two most important states, reporting, in 1909, 6,831, or 78.1 per cent of the total number.

Of the total number of upright pianos manufactured, 34,495, or 9.4 per cent, were for or with player attachments. The value of the instruments for or with player attachments formed 16.7 per cent of the total value of upright pianos. New York reported 18,917, or 54.8 per cent, of the upright pianos for or with player attachments. Of the 10,898 player attachments which were not attached to pianos, 2,789, or 25.6 per cent, were reported by establishments located in New York, but the value of the attachments made in New York was more than half of the total for the country, which was $1,474,630.

In 1909, of the total number of reed and of pipe organs reported, 1.9 per cent were pipe organs, but of the combined value 51.1 per cent was contributed by pipe organs. In 1899, of the total number, only five-tenths of 1 per cent were pipe organs, while of the total value they constituted 22.6 per cent. In the number of reed organs there was a decrease during the decade 1899-1909 of 39.9 per cent, and in their value a decrease of 35.8 per cent. For pipe organs there was an increase of 117 per cent in number and of 130.5 per cent in value. In the manufacture of reed organs, Illinois was the leading state in 1909 as in 1899, reporting 37.5 per cent and 41.3 per cent, respectively, of the total value. In the value of pipe organs manufactured, Massachusetts, New York and Illinois reported about equal amounts in 1909, Illinois showing much the largest gain from 1899 to 1909, while a decrease took place in Massachusetts.

The manufacture of pianos and organs has had an uninterrupted development since 1869, when products to the value of $11,886,444 were reported. In 1909 the value of products was more than seven times as great, $89,789,544. The largest increases are shown for the decade from 1899 to 1909, when the number of persons engaged in the industry increased 80.4 per cent and the value of products 118.9 per cent. The large piano and organ factories are of comparatively recent development. In 1869 the average establishment gave employment to only twenty-four wage earners and the average value of products was $46,797; in 1909 the average number of wage earners was seventy-five and the value of products $177,100.

The decrease in the number of proprietors and firm members is no doubt due to the growth in the corporate form of ownership. On the other hand, there was an increase of 134.8 per cent during the decade ending with 1909 in the number of salaried employes.

The value of the output of factories engaged principally in the manufacture of pianos was $66,569,273; organs, $4,745,655; and piano and organ parts, $18,474,616. The value of the material was $43,764,737, and the value added by manufacture was $46,024,807. The number of employes was 41,882, and the wages and salaries paid amounted to $28,313,754.

Separate figures are given for certain classes of smaller musical instruments or for materials for such. The instruments made include cornets, trombones, tubas, and other brass instruments for band and orchestral use, cymbals, drums, xylophones, castanets, dulcimers, harps, lyres, guitars, lutes, banjos, mandolins, zithers, violins, violoncellos, flutes, flageolets, piccolos, etc., and parts of such instruments.

The value of products for this branch of the musical instrument industry does not show the general increase from census to census so noticeable in the two preceding branches. The value of products in 1909 was 7.3 per cent less than in 1904, and 4.9 per cent less than that in 1899. During the first half of the decade ending with 1909 there was considerable decrease in the number of establishments, accompanied by smaller decreases in the number of persons employed, capital invested, wages paid, and cost of materials, and an increase in the salaries, miscellaneous expenses, value of products, and value added by manufacture. During the last half of the decade there was a decrease in all of the items except the number of establishments, number of salaried employes, and salaries.

Phonographs and graphophones are given separate consideration. The establishments assigned to this industry were engaged chiefly in the manufacture of phonographs or graphophones for either disk or cylinder records, including those for office dictation; also the manufacture of records, blanks, horns, needles, or other supplies and materials used in the industry.

Each census since 1899 has shown an increase in the manufacture of phonographs and graphophones, but by far the greater development occurred during the five-year period 1899-1904, when there was an increase of 2,525, or 178.4 per cent, in the number of persons engaged in the industry, and of $7,990,801, or 355.7 per cent, in the value of products. While there was an increase of only seven in the number of establishments during the decade, the number of persons engaged in the industry in 1909 was more than four times and the value of products more than five times as great as the corresponding figures for 1899. In 1909, sixteen of the eighteen establishments were operated by corporations. New Jersey is by far the leading state in the industry, as measured by value of products, followed by Connecticut and New York in the order named.

Of the total value of products reported for the industry in 1909, $11,725,996, the value of complete instruments formed $5,406,684, or 46.1 per cent, and that of records and blanks $5,007,104, or 42.7 per cent. The remainder, $1,312,208, or 11.2 per cent, represented for the most part horns, needles, matrices and other supplies used in the manufacture or operation of the instruments.

Good Sales at Furniture Exhibits

Over four thousand buyers attended the furniture expositions which are just closing in the Chicago and Grand Rapids markets. The business placed with the manufacturers has been surprisingly good in view of general conditions and assures busy factories during the remainder of the year. Hundreds of lines were shown in both markets, necessitating a visit of two or three weeks on the part of buyers desirous of seeing the entire exhibits.

Oak and mahogany were, of course, leaders in the aggregate. The biggest seller of all the lines offered was oak furniture of various kinds and for all purposes in simplified designs adapted from early English periods. With the tables, beds, etc., in these period designs chairs were offered with cane seats and cane paneled backs. Probably the next sellers were the many offerings in Adam designs which, in the higher grade lines were of satinwood, while the moderate priced styles were offered in enameled effects and in mahogany and imitations of mahogany.

The feature which will probably have a more or less unfavorable effect on the demand for mahogany lumber is the favorable offering and sale of over-stuffed furniture in which only the legs are visible. In addition, the rather remarkable call for upholstered suits with a bed davenport and chairs to match—presumably for small flats—will affect the consumption of mahogany to the extent to which such upholstered lines take the place of the conventional designs of mahogany living room furniture.

The feature of the season which stands out with pre-eminence was the exceedingly large sale of medium-priced lines for various purposes and the correspondingly limited purchases of high-priced goods. Consequently there was an apparently small call for French period styles in which the showy imported Circassian walnut figures with especial appropriateness. As a consequence, the sales denoted a falling off in the use of this beautiful product of Asia Minor.

The use of solid mahogany, including drawer work and backs throughout, seems to be increasing. Very little of the toona or natural finishes were seen, the colors being dark or old brown finishes appropriate to the early English periods.

As suggested, the swift gain in popularity of the Adam period furniture in this country is a big factor in the current demand. The appropriate wood for this period stuff in the pure representations is satinwood which was seen on occasions, one concern making up complete bedroom suits in solid satinwood. However, on account of the great demand for the more moderate priced stock and the coincident demand for the Adam design, manufacturers offered a large line of Adam furniture made up in painted effects which, in both sales, had a great run. Practically every firm offering exhibits at the two markets increased its line in enameled goods which were offered in various shades of French gray, ivory, cream and white. This style, while beautiful, seems better suited for looks than for utility. In conjunction with the painted lines, there are many offerings of Adam period stuff in mahogany and mahogany imitations.

Oak figured very largely in living room, dining room, library and den furniture. The English schools, including Tudor, Gothic, Jacobean and Elizabethan, are all most appropriately worked in oak in the high-grade lines, while in the more expensive stuff this king of cabinet woods still reigns supreme.

The use of red gum does not seem to be making undue strides in the better grades of furniture, although it is increasing in use, noticeably in the less expensive lines. It is probable that its reputation for checking, warping, twisting, etc., which it has had to live down is having a marked effect on its consumption. Gum furniture does not sell well in the South because of this prejudice. However, certain concerns are specializing in the manufacture of high-class gum furniture, one concern making a specialty of quarter-sawed red gum products, to which it applies its trade mark "Kyonyx." This concern has been operating for ten years, using five-ply stock with selected figure, and has experienced wonderful success.

Not much figured birch was seen in the exhibits, but the offering of bird's-eye maple seemed to be about as large as usual.

Red cedar in chests of various kinds made a very attractive showing at both exhibits.

The total volume of sales was of big proportions, but owing to the big medium-price demand the value represented was normal.

Exports and Imports of Forest Products

The Department of Commerce has published statistics giving exports and imports of lumber and other forest material for June, 1913, and also for the year ending June 30. The imports of manufactured products follow:

	—June—		—Year Ending June 30.—	
	Quantity.	Value.	Quantity.	Value.
Briar wood and ivy		$ 15,501		$ 313,189
Cedar, feet	971,000	51,083	19,092,000	1,094,048
Mahogany, feet	3,620,000	312,304	66,318,000	4,839,625
Other cabinet woods		108,466		1,441,541
Logs, feet	13,198	159,189	140,876,000	1,506,235
Pulpwood, cords	115,391	804,906	1,036,894	6,954,952
Rattans, reeds etc.		182,407		1,816,319

The manufactured articles imported are listed in the following table:

	—June—		—Year Ending June 30.—	
	Quantity.	Value.	Quantity.	Value.
Lumber, feet	96,548,000	$1,782,573	1,090,628	$18,907,345
Laths	61,550,000	180,366	712,099	1,905,154
Shingles	42,865,000	115,441	560,297	1,399,751
Other manufactures of lumber		78,730		885,888
Chair cane		42,731		620,893
Furniture		69,595		959,723
Wood pulp, pounds	76,717,629	1,063,158	1,130,092,026	16,165,316
Total wood and manufactures of wood		$5,251,035		$61,823,988

The exports from the United States for the same periods are shown in the table below:

	—June—		—Year Ending June 30.—	
	Quantity.	Value.	Quantity.	Value.
Hickory logs, feet	721,000	$ 27,321	8,293,000	$ 309,896
Oak logs, feet	60,000	2,695	3,139,000	125,818
Walnut logs, feet	1,366,000	70,492	12,711,000	692,665
All other round logs, feet	10,745,000	248,962	149,381,000	3,095,029
Firewood		7,326		228,244
Sawed and hewed timber, feet	49,010,000	1,056,885	511,637,000	11,150,577
Lumber, feet	214,954,000	5,077,851	2,550,308,000	61,975,919
Railroad ties	495,906	245,806	5,416,713	2,616,563
Shingles	11,006,000	31,867	106,903,000	261,058
Shooks	1,118,938	372,740	15,103,733	4,404,792
Staves	6,532,405	497,219	89,005,624	7,325,535
Heading		19,662		346,258
Other cooperage		271,630		3,087,005
Doors, sash, and blinds		132,090		1,598,442
Furniture		523,334		7,295,256
Empty barrels		22,762		383,404
House finishings		80,420		1,023,581
Woodenware		58,596		767,317
Wood pulp, pounds	1,938,411	42,830	41,475,557	764,020
Other manufactures of wood		664,434		7,620,102
Total wood and manufactures of wood		$9,497,735		$115,704,777

A good reputation has selling value in the lumber business as well as elsewhere. If you are skeptical on this subject try selling the product of an unknown mill against that of one known as having a reputation for furnishing good stock at even prices.

A study of moisture and its relation to the strength of wood furnishes evidence that too much liquid refreshment is weakening to wood as well as to man.

Here is hoping that we really get a more elastic currency for sometimes it is an awfully long stretch to the next pay day.

Hardwoods and the Dry Kiln

Notwithstanding the fact that the best dry kilns of the country find a ready sale in connection with the preparation of hardwood lumber and that the use of hardwood lumber in cabinet work calls for the highest order of scientific drying, there are proportionately fewer kilns in connection with hardwood sawmills than can be found in connection with pine mills. This is a situation a little difficult to thoroughly understand, even though there are many easy explanations. Some of these explanations do not really explain, and perhaps the main reason why there have not been more dry kilns built in connection with hardwood sawmills in the past is that the average hardwood sawmill man has fought shy of installing dry-kiln equipment, preferring to let the consumer of his product take care of the actual drying for use.

The conclusions arrived at by many of the various students of the lumber industry is that sawmilling is precarious business at which very few people attain great wealth. One of the strong reasons assigned for this condition is that a long time is required between buying stumpage and marketing the lumber product. Not only is the time often long between the tree and the market, but also during this interval market conditions may alter considerably so that at the time one is ready to market a product which has been sawed and air-dried, the market may be flooded with just this kind of product and the prices such that there is not much profit in the business. The yellow pine sawmill men learned two important facts long ago. One of these was that considerable money and freight can be saved by kiln-drying stock before shipment. The other lesson learned was that by having dry kilns enabling them to shorten the length of shipping time they could take advantage of the market and be in a position to realize more handsomely for their products. Certain elements in the hardwood business learned this same lesson several years ago. The stave trade, for instance, used to depend upon air-drying almost entirely which took sixty or ninety days of favorable weather and longer during the wet seasons. Hence the stave manufacturers often found themselves with nothing but green stock on hand at a time when markets were calling for dry stock at good prices, and they were unable to supply the market. Often by the time the green stock was ready for shipment, this activity was no longer apparent and the chance for a good profit was gone. This led many stave manufacturers to install dry kilns for getting out their product with quicker and better results. It was found that it takes less capital to erect a good kiln than it would to carry a big stock of material on hand, drying, and further, that the mills could be operated with the same amount of capital and the results would be more satisfactory. The hardwood sawmill man should be able to realize satisfactory returns from the same investment. The main trouble seems to have been that the average hardwood sawmill man has been rather disposed in the past to keep away from the use of dry kilns and has made every effort to get along without them. Some have embraced the theory that since the furniture manufacturer and other users of hardwood have installed kilns for their own use to insure absolute dryness in the lumber they use, there is no need for the manufacturer to do the same thing and thus double the total drying equipment.

In the veneer business, which is commanding more and more attention, it has been found that the best results in fine cabinet work are secured by drying at the manufacturing end and then re-drying at the consuming end. Proper seasoning of hardwood products does not consist merely of drying, but rather involves drying and re-drying, so that what looks like an unnecessary doubling in the drying process is almost a necessity in itself. The hardwood trade is becoming more and more dependent upon the dry kiln at the manufacturing end, but this method is not so general in connection with hardwood manufacture as it might well be. It would seem that the turning to the dry kiln should be more voluntary and that the hardwood manufacturer should not have to be convinced so completely as to its money-making possibilities. The installation of dry kilns at most of the hardwood mills of the country would result in a more even market, as it would enable the millman to take advantage of fluctuations, and hence there would not be prolonged periods of shortness in dry stock. As stated before, it would not require any more capital to erect dry kilns than is required to carry stocks for air-drying. In fact the dry kiln should not be a matter of expense, but a highly satisfactory investment.

American Forest Trees

The seven-hundred-page illustrated book entitled "American Forest Trees" recently issued by HARDWOOD RECORD, is receiving the encomium of many individuals whose opinion of its character is fully worth while.

Below are quoted excerpts from sundry letters:

Cadillac, Mich., July 19th, 1913.

Dear Mr. Gibson:

This is a remarkable book of yours which has come to hand. There are plenty of tree books, but this is different from any, and being different, occupies in all forest literature a place of its own.

1. It keeps the proper middle line between science and art, between botany and workman's knowledge.

2. It does not contain what the other books do, namely: no mere "copy."

3. It is written in the best of English, and is readable like a good novel. Reading, usually a drudgery, is here converted into joy.

4. It contains a store of knowledge never before presented in a systematic form.

I herewith enclose check for five additional copies for the use of my students.

C. A. SCHENCK.
Biltmore Forest School.

Chicago, Ill., July 19th, 1913.

Dear Mr. Gibson:

I take pleasure in enclosing you herein my check for six dollars covering copy of American Forest Trees, delivered yesterday, and, while I have only had an opportunity to glance over it casually, I have gone far enough to appreciate its value. It is just what I expected it to be.

E. W. MCCULLOUGH, Sec'y & Gen. Mgr.,
National Implement & Vehicle Association.

Berwind, W. Va., August 4th, 1913.

Dear Mr. Gibson:

I want to thank you for sending me volume, American Forest Trees, and I can assure you it gives me pleasure to enclose my check for six dollars. It will fill a long felt want in my small library.

S. G. MCCLELLAND, Mgr.,
Berwind Lumber Company.

Chicago, Ill., July 9th, 1913.

Dear Mr. Gibson:

I have received a copy of your remarkable and very beautifully illustrated work on American trees. I prize it for its very genius.

SAM D. HUGHES, Editor,
Newspaper Enterprise Association.

Chicago, Ill., August 1st, 1913.

Dear Mr. Gibson:

I enclose check, six dollars, in payment of book, American Forest Trees.

If you never do anything more you certainly deserve great credit for this, as it is a great book.

JOHN C. SPRY.

Philadelphia, Pa., July 30th, 1913.

Dear Sirs:

My glance through the leaves of American Forest Trees shows that this book will prove a worthy addition to works on this subject. I am glad to have in on my shelves, and I know it will be a boon to lumbermen and all nature lovers.

OWEN M. BRUNER.

Columbus, Ohio, August 1st, 1913.

Editor HARDWOOD RECORD:

Your volume, American Forest Trees, is received.

It is an excellent digest of the forest and its products "what am."

J. W. TAYLOR.

Boston Mass., August 1st, 1913.

Dear Mr. Gibson:

The writer looks forward to spending a good many pleasant evenings reading your book on American Forest Trees.

HOBART & CO.

Incidentally, while this magnificent de luxe volume of more than seven hundred pages was published as a subscription work, there are several hundred copies yet unsold. The books can be secured at the subscription price of six dollars by express prepaid, with the privilege of examination before payment is made.

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 521—Has Carload of Pencil Cedar

Lincoln, Neb., Aug. 2.—Editor HARDWOOD RECORD: We have a customer in the western part of Nebraska who writes that he has on hand about a carload of genuine red cedar logs "not western or southern red cedar such as you buy at the present time, but red cedar such as grew in the western part of Nebraska about a hundred years ago." He states that they measure 6" to 12" through and 10' to 16' long; that they have been used in log houses and are hewn about square. He says the logs are thoroughly seasoned and in fine condition, and a nice dark red through and through.

If you use anything of this kind, or can refer us to anyone who does, we shall be very glad to have you write us.

Anyone interested in this carload of red cedar can have the address of this writer on application.—EDITOR.

B 522—Has Walnut for Sale

San Francisco, Cal., July 26, 1913.—Editor HARDWOOD RECORD: I have forty acres at Lawson, Mo., of walnut timber to dispose of. Can you give me the names of parties who deal in this class of timber? Also, would like your opinion concerning the approximate value and usual manner of selling.

The above correspondent has been supplied with a short list of buyers of black walnut timber and the general information he seeks. Any others interested in this inquiry can have the address on application.—EDITOR.

B 523—Approves of Wood vs. Steel Car Campaign

New York, July 30, 1913.—Editor HARDWOOD RECORD: You ought to be congratulated on the article entitled "The Steel Car Campaign on Again," appearing in your issue of July 25, and we are glad to have our few words on the subject included in your remarks.

The writer of the article is to be congratulated on his plain statement of facts and dispassionate review of the situation. This article should be printed in pamphlet form, excluding our short letter, and placed in the hands of the operating officials of the railroads and of every director of the railroad companies, while, if there is any way of having it put in the public press and the magazines, it would bring to the attention of the traveling public a subject that would be of great interest to it. Perhaps you could suggest a means by which such a programme can be carried out, and if so, we would like very much to hear from you as to any suggestions you can make.

ICHABOD T. WILLIAMS & SONS.

The above correspondent has been advised that at the time the original articles on the subject of the wood versus steel car were issued in HARDWOOD RECORD, reprints were made and mailed to all railroad operating officials as well as to the leading newspapers and magazines of the country, which expense was carried exclusively by HARDWOOD RECORD. It is suggested that the campaign should be continued, both for the purpose of educating the traveling public to the frailty of steel cars, and furthermore the facts should be presented to every member of Congress in a logical way so that they may be informed on the subject when the pending steel car legislation is again presented to the House and Senate. HARDWOOD RECORD will be glad to co-operate in supplying all the information it has at hand, including photographs or illustrations, to further this very desirable educational campaign.—EDITOR.

B 524—Seeks Butternut Lumber

San Antonio, Tex., July 24.—Editor HARDWOOD RECORD: Will you kindly advise us where we can secure carload lots of butternut lumber?

The writer of the above letter has been supplied with addresses of producers of butternut. Any others interested can have the address upon application.—EDITOR.

B 525—Seeks Addresses of Gunstock Manufacturers

Lexington, Va., July 29, 1913.—Editor HARDWOOD RECORD: Will you kindly furnish us with some addresses of gunstock manufacturers, as we have some stump wood that would be suitable for that purpose?

A short list of gunstock manufacturers has been supplied. Any others interested can have the address upon application.—EDITOR.

B 526—Seeks Oak Dimension

Louisville, Ky., Aug. 1, 1913.—Editor HARDWOOD RECORD: We are in the market for a number of carloads of dimension stock in white oak, both plain and quartered, clear cuttings across board, of 1" stock. All stock to be thoroughly dry-kilned, band sawed lumber preferred, in the following lengths,—43", 46", 55", and also a large quantity of 36". It must be free from all defects, such as season cracks and knots.

Anyone interested in negotiating for sale of oak dimension can have the above address on application.—EDITOR.

B 527—Want Market for Edgings and Trimmings

South Bend, Ind., July 31.—Editor HARDWOOD RECORD: In your July 10 issue we were very much interested in an article, "Waste from Edgings and Trimmings," but there is no information given as to where one might dispose of these waste pieces of lumber. We have a great deal of cuttings from poplar, ash, oak and pine and if you could put us in touch with anyone using materials of this kind, we certainly would appreciate the favor.

The writer of the above letter has been advised that outside of the use of wood for distillation, the general market is confined to the production of dimension stock for furniture and kindred trades. However, anyone interested in the inquiry can have the address upon application.—EDITOR.

B 528—Oak Squares Wanted

New York City, July 29.—Editor HARDWOOD RECORD: Can you advise us where we can secure list of manufacturers of oak squares 18" to 48" long, 1½" to 4" wide and thick, mostly 2½" and 3" x 30" long.

This inquirer has been furnished with a list of oak square manufacturers. Others interested can have his name by inquiring of this office by mail.—EDITOR.

B 529—Wants 1" Log Run Tupelo

New York City, July 26.—Editor HARDWOOD RECORD: One of our customers on a Philadelphia rate of freight is interested in a large quantity of 1" log run tupelo gum, but does not want the hard stock which comes from North Carolina. Could you give us some information as to the proper section to locate this stock and where it could be brought into Philadelphia by rail at a reasonable figure?

—— LUMBER COMPANY.

The above writer has been supplied with names of a number of concerns in a position to supply large quantities of this stock. Others interested may have the necessary information by addressing this office.—EDITOR.

B 530—Wants Wide One's and Two's Cottonwood

Columbus, O., Aug. 5.—Editor HARDWOOD RECORD: I will pay cash less two per cent for ten carloads of 4/4 x 10½" and wider first and seconds cottonwood at $36 f. o. b. cars Columbus, O., rate. Shipment must be free of warped and woolly stock.

B 531—Seeks Ash Dimension and Sycamore Lumber

Boston, Mass.—Editor HARDWOOD RECORD: We are in the market for dimension white ash in carload lots, seventy-five per cent to be 4½" x 6" x 8' 8" and twenty-five per cent to be 4½" x 6" x 9' 6". We are also in the market for sycamore lumber. Will you kindly supply us with the addresses of concerns who can handle these orders?

The writer of the above letter has been supplied with brief list of sycamore producers, and also of possible source of suply for the ash dimension. Any others interested can have the address on application.—EDITOR.

B 532—Wants Market for Small Dimension

Gardner, Mass., Aug. 5.—Editor HARDWOOD RECORD: Can you inform me of the name of some manufacturers of small wood parts to whom it might be possible to dispose of a constant supply of small oak, birch and maple pieces running from 1" to 2" thick, from 1" to 10" wide, and from 6" to 20" long? I should think there would be a market for such wood with the makers of pail handles, wooden heels, etc., if the price were right.

Anyone interested in this source of supply for small dimension can have the address of the writer on application.—EDITOR.

B 533—Makes Ebonized and Transformed Wood

Long Island City, N. Y., Aug. 7.—Editor HARDWOOD RECORD: A lumber dealer in this vicinity, a subscriber to your paper, was kind enough to call my attention to an inquiry for a concern producing ebonized maple. I beg to inform you that I am producing all kinds of ebonized woods up to two inches thick, and also other kinds of dyed veneers and lumber colored clear through, besides the silver wood which is used for high-class trim

and furniture. I should certainly be thankful if you would take notice of such mentioned fact. I claim to be the only manufacturer in the United States turning out the above-mentioned transformed woods and veneers in a commercial way. I also keep a stock of it.

———————.

Anyone interested in the authorship of the foregoing letter can have the address upon application.—EDITOR.

B 534—Regarding New York Building Code

New York, Aug. 6.—Editor HARDWOOD RECORD:—We have your letter of Aug. 4 enclosing copy of letter you received regarding the building code of New York City. As you will see from letters mailed you in the last few days we are giving this matter a great deal of attention. It is not an easy matter, however, to handle and it is our opinion that there is some justification for the building codes committee taking the position it does. It, of course, proposes working a very great hardship on the lumber trade and its proposition to entirely eliminate wood from buildings one hundred feet and over is, we believe, too drastic to be put into effect, and we are using whatever influence we can to bring about a proper solution of the difficulty. It is very certain from our investigation and attendance at the hearing that the building codes committee has fully made up its mind to recommend the objectionable section to the entire board of aldermen for adoption, and the real fight of this will have to occur when the committee report is submitted to the aldermen.

The retailers and wholesalers in this market are working very hard on the matter and we are looking for a satisfactory adjustment.

Thanking you for writing us as you have, and assuring you we will do what we can, I remain, yours very truly,

E. F. PERRY, Sec'y,
National Wholesale Lumber Dealers' Association.

Because of lack of space the preceding letter, received on day of going to press, is printed here.—EDITOR.

Clubs and Associations

Program of National Commissary Managers' Meeting

The official convention program for the comiug meeting of the National Commissary Managers' Association which will take place at the Planters hotel, St. Louis, Mo., on Monday, Tuesday, Wednesday and Thursday, Aug. 18, 19, 20 and 21, has just been issued. The program includes the usual initial order of business, various addresses on such topics as "The Retail Merchant," "The Commissary Manager's Greatest Problem," "The Greatest Leak Around the Commissary," "The Modern Commissary and How to Manage It." There will be a general discussion on store arrangement, figuring costs and profits, handling credits and cash sales, eliminating losses in leaks, the selling end, and on miscellaneous topics. Ample entertainment has been provided, including luncheons, dinners, sight-seeing trips, automobile rides, a boat ride on the Mississippi, and a trip to the American league ball park to witness the game between St. Louis and Washington, etc.

Southern Loggers' Association to Meet

Sept. 29 and 30 are the dates set for the annual convention of the Southern Loggers' Association, which will be held at the Hotel Grunewald, New Orleans. A definite program has not yet been worked out, but the program committee is now actively engaged in formulating such a program and from the suggestions which it has made, it will evidently be a most interesting and instructive one.

Nashville Club to Make Exhibit

The Nashville Lumbermen's Club at its last meeting discussed the matter of abolishing the Commerce Court, having previously adopted a resolution favoring such action by Congress. Letters were read on the question from Congressman Byrns and others.

The club also received a report that the Nashville Manufacturers' Association has leased a building on Third avenue, which will be used for a permanent exhibit of products manufactured in Nashville. It was decided that the club should have one of the most attractive exhibits in the building. A committee will be appointed to perfect plans later.

Meeting of North Carolina Manufacturers

On Saturday, July 26, the recently organized Western Carolina Lumber and Timber Association held its first regular quarterly meeting at Asheville, N. C.

The question of whether or not the association should be incorporated came up for considerable discussion and the unanimous opinion was that incorporation papers should be taken out immediately. A committee was appointed for this purpose. The proposed advances in freight rates from western North Carolina points to points East were discussed freely and the members were united in their determination to oppose such advances by every means possible. This question has been discussed in previous issues of HARDWOOD RECORD. If such advances went into effect they would be a very serious matter for North Carolina manufacturers. The statement of various members showed that there would be no difficulty in financing such a protest. T. J. Harkins, one of Asheville's prominent attorneys, who has been closely connected with lumber affairs, outlined to the members the best method to pursue in combating the railroad's efforts. He said that a petition has already been filed through the National Wholesale Lumber Dealers' Association with the Interstate Commerce Commission in a protest against the advance, and as a result a suspension was secured until the first part of September. He expressed a doubt, however, as to whether the commission would be able to take up the case by that date. Because of this, the speaker said that he believed there would be no trouble in securing a further suspension, which would be necessary in order to prepare a proper protest. The speaker then talked generally on the affairs and procedure of the Interstate Commerce Commission. It is probable that he will be asked to prepare the petition on the part of the North Carolina lumbermen.

A further discussion along the lines of milling-in-transit rates and regulations developed the fact that there is considerable hope that there will be a modification of many of the irksome regulations and restrictions now in effect in connection with the transit privilege.

Following the meeting, which occurred in the evening, a midnight supper was served at one of the city's restaurants, President W. O. Riddick being the host. Several speeches followed the supper, among them being one by G. A. Murray, one of the pioneer lumbermen of Asheville, who spoke interestingly of the development of the lumber business in the Appalachian region. He stated that the organization of the association undoubtedly marks a new era in the accomplishments of the lumbermen of that section of the country.

Special Meeting Chicago Lumbermen

Monday noon, Aug. 4, the Lumbermen's Club of Chicago held a special meeting at the club rooms for the purpose of passing upon recommendations of certain changes in the by-laws. The changes had to do mainly with regulations regarding dues and membership and, after having been read, were passed upon collectively by the members present, and adopted.

After the business meeting J. E. Rhodes, secretary of the National Lumber Manufacturers' Association, talked interestingly and encouragingly on the proposed forest products exposition. His talk was mainly advance information on the proceedings of the special committee of the association which was to meet the day following, report of which meeting is given fully in another part of this issue of HARDWOOD RECORD.

Lumber Exporters Meet

The board of managers of the National Lumber Exporters' Association met at Cincinnati on Friday, July 25. There was a full attendance. In addition to the regular officers reports, the question of through bills of lading came up for discussion in connection with the fact that railroads served notice on shippers that after Aug. 23 they would not issue any through bills because of the action of the steamship lines in refusing to absorb demurrage in the event of failure to release cars after a prescribed time limit. The fact that the Interstate Commerce Commission has no direct jurisdiction over the foreign steamship companies prevented any definite action, although it was decided to petition Congress for the enactment of legislation enabling the commission to determine the conditions under which foreign steamship lines shall be allowed to operate in American ports.

It was determined that the next annual meeting of the association shall be held at Chicago in January, 1914.

Official Report of National Hardwood Convention

The National Hardwood Lumber Association has just issued through its executive office, McCormick building, Chicago, the official report of the sixteenth annual meeting held June 5 and 6 at the Hotel Sherman, Chicago. The report as usual contains photographs of the various officers and directors of the association and gives a verbatim report of the meeting itself. It is gotten up in the usual attractive style and should be secured by all those interested in hardwood lumber, as it contains a great deal of information valuable to them.

Affairs With the Louisville Hardwood Club

The Louisville Hardwood Club is considering the establishment of a traffic bureau, though detailed plans are still to be worked out. The idea as yet is in embryonic form, and was suggested by the fact that most of the members of the club have been under considerable expense individually in the preparation of cases involving traffic questions, most of them before the Interstate Commerce Commission. The plan has been proposed to pool the appropriations of the various concerns for traffic work, and with this amount establish a bureau on a permanent basis. The plan will be acted on in the near future.

During the extremely hot weather, which marked practically all of July, the Louisville Hardwood Club continued to meet regularly, most of its weekly sessions being in the country, where chicken dinners were demolished under the trees. Riverview, a resort overlooking the Ohio river, was used for the meeting this week.

The hot weather which was experienced until recently in Louisville interfered seriously with lumber-yard operations, many of the sturdy Ethiopians, who are usually able to go a route in the most tropical of weather, being forced to quit. The cool weather which came with August has been a decided relief, and is enabling work to be pushed a little more vigorously than heretofore.

A workmen's compensation law will probably be adopted at the next session of the Kentucky legislature, which meets in January, and the Kentucky Manufacturers' and Shippers' Association, of which many of the hardwood men are members, is preparing to handle the situation by shaping the bill to be passed and preventing unreasonable provisions from being included, rather than by opposing it altogether. It is believed that this plan will get far better results than one of blind opposition.

D. E. Kline, head of the Louisville Veneer Mills, recently addressed a number of letters to leading consumers, asking their opinion as to the outlook for business. Practically all of the replies were optimistic and indicated a belief that fall trade this year will be satisfactory.

With the Trade

Mowbray & Robinson Company Buys More Timber

The Mowbray & Robinson Company of Cincinnati, O., who has been buying eastern Kentucky timber actively of late, has closed a deal for 45,000 acres of timberland in Clay and Leslie counties, the price being reported as $200,000. The company purchased the timber from O. A Sears of Lexington, Ky., and Mike Courtney of Winchester, Ky. The probabilities are that the company will manufacture it at its proposed mill in Perry county, where it recently acquired a considerable amount of timber.

Wood-Mosaic Company Has Second Fire

Will McLean, president of the Wood-Mosaic Company of New Albany, Ind., one of the largest producers of flooring and veneers in the country, was called back to New Albany from Rochester, N. Y., Aug. 1 by a wire announcing that the plant was in flames. This is the second misfortune of the kind the company has had this year, the sawmill at Highland Park, Ky., being destroyed with $65,000 loss only a few months ago. It is now being rebuilt. The New Albany fire was much more disastrous, involving a loss of $200,000, and destroying the flooring factory, veneer mill, lumber-yard and dry kilns. Logs on the yard, intended for veneer manufacture, and the warehouse, containing several hundred thousand feet of flooring, were saved, fortunately, and the company will consequently be able to take care of its customers pending a resumption of operations. The plant will be rebuilt, it is determined, but the exact location is yet to be decided upon. As the sawmill is located at Highland Park, a Louisville suburb, this city probably will be the site of the flooring plant and veneer mill as well. The company had $210,000 of insurance on its plant and stock.

Richardson Lumber Company Purchases Timber

It is reported from Alpena, Mich., that the Richardson Lumber Company of that city has purchased all the land and timber holdings of the Loud-Hoeft Lumber Company of Rogers City, Mich. By this purchase the Richardson company acquires 8,000 acres of timberland in Presque Isle County and in addition a complete sawmill equipment in Rogers City and an interest in the steamer C. H. Starke. The consideration is reported to be in the neighborhood of $200,000. It is estimated that the timber on the 8,000 acres will run from 40,000,000 to 50,000,00 feet of hemlock and hardwoods. It is further understood that the Louds will hereafter confine their lumber operations to Mackinac county, where they have large timber holdings and a sawmill.

Veneer Company Lets Contract

It is reported that the Underwood Veneer Company of Wausau, Wis., has let a contract for the cutting of 30,000,000 feet of timber situated between Nashville and Crandon, Wis., to the Rogers Lumber Company.

New Factory for Lyon & Healy

Lyon & Healy, the well-known piano firm of Chicago, recently started work on its new factory on Fullerton avenue near Forty-first avenue. It is planned to spend $250,000 on this structure, which will cover a ground area 140 x 500 feet. When completed the factory will be one of the finest of its type ever built. It will have a ground area of approximately seven acres adjoining the main line of the C. M. & St. P. railroad, which at this point is elevated about 16 feet above the ground level. Thus a direct entrance into the building is provided.

Andrews Lumber Company Incorporated

The Andrews Lumber Company is the name of a new incorporation of Escanaba, Mich., men who will operate at Mamasse, Ont. The timber holdings of the concern will probably last for the next nine or ten years. The promotors and principal owners are J. R. Andrews and J. A. McGuire. Mr. McGuire went to Mamasse several weeks ago and is getting the work under way. The company has purchased 7,000 acres of leased timber on which it has built camps. It is expected that a sufficient supply of logs will be at the mill by the time it is ready for operation in the winter. Shipments will be by water.

Sawmill Destroyed by Fire

The Hines Lumber Company mill at Iron River, Wis., was completely destroyed by fire resulting from lightning on the night of July 27. The contingent loss was estimated at $50,000. The yards and planing mill were saved after strenuous work. As much of the timber that was being cut by the Iron River mill is also available to the Park Falls mill of this company, it is not thought that the Iron River mill will be rebuilt. P. I. Bogie, former superintendent of the Iron River mill, has already been transferred to Park Falls.

Modern New Mill in West Virginia

The Ruth Bell Lumber Company is erecting a fine new mill at Marsden, W. Va., below Albright. In addition the company is building comfortable quarters for housing its employes. It will build several miles of railroad up Roaring Creek, on which its timberlands are located. Cheat river, at the point where the mill is located, will be bridged and the lumber will reach the M. & J. railroad over the siding of the Lewis Lumber Company.

Roddis Plant Saved by Sprinkler

Fire recently occurred at the plant of the Roddis Veneer & Lumber Company of Marshfield, Wis., but, due to the fact that the plant is completely equipped with automatic sprinklers, the resulting loss was only $500. The damage occurred mostly in veneer, which was sprinkled, and did not result directly from the fire.

Lumber Company Makes Long Lease

The Tegtmeyer Box & Lumber Company of Chicago has leased from Charles W. Tegtmeyer the property at the southwest corner of Canal and West Eighteenth street for a ninety-five years period from March 1, 1913, at an annual rental for the first twenty years of $7,000, the next thirty years $8,000, the next thirty years $9,000 and the remaining fifteen years $10,000. The lessee has agreed to construct by March 1, 1933, a building to cost $40,000, to be purchased by the lessor at the expiration of the term at fifty per cent of its appraised value.

Wiborg & Hanna Plant Burned

The night of July 26 the plant of the Wiborg & Hanna Company of Cincinnati, O., was destroyed by fire, resulting in a loss of $75,000, which is fully covered by insurance. The fire was discovered about six o'clock in the planing mill, a structure 200 feet long and 60 feet wide, equipped with the most modern of machinery for the manufacture of flooring, siding and all kinds of interior trim and finish. The mill burned like a big paper box and soon was completely destroyed, with the valuable machines and finished product a total loss. The adjacent piles of hardwood lumber were an easy prey to the flames and burned one after another until about a million feet of hardwoods were destroyed. All adjacent buildings, including the boiler and engine room, were also destroyed, as well as many freight cars, either empty or loaded, that happened to be on the switches in the path of the fire.

The Wiborg & Hanna Company is an old concern, being founded about twenty years ago by John Hanna and Harry Wiborg, both well-known lumbermen. The company expanded and moved to its present site, covering eighteen acres, eight acres of which are in constant use. Owing to financial difficulties the firm was placed in the hands of Receivers William Hay and Edward Richie about five years ago and under the active management of William Hay was making much progress toward a settlement with its creditors.

The receivers will immediately rebuild the plant on the same site and resume operations as quickly as possible.

Financial Statement Lumbermen's Underwriting Alliance

The Lumbermen's Underwriting Alliance, U. S. Epperson & Co., attorney, Kansas City, Mo., has issued under date of July 28 its seventeenth semi-annual financial statement, in which a thoroughly satisfactory half year is reported.

Based on earned premiums, the first six months of 1913 showed operating and legal expenses 20.5 per cent, fire losses 35.37 per cent, saved to subscribers, 44.28 per cent, making the total expense of 100 per cent.

Ready resources, including cash in banks, aggregate $542,210.88, gilt edged bonds, $256,361.75, premium deposits in course of collection, $102,-943.06, giving a total of ready resources aggregating $901,515.69.

The surplus has been improving notwithstanding the payment to policy holders within the period of $126,310.10 in savings dividends. The net assets on Jan. 9, 1913, were $842,823.10 and on July 9, 1913, $875,088.55.

The report states that there is an ever increasing disposition among the subscribers to co-operate in removing and remedying dangerous conditions. The correspondence from field men indicates that Alliance subscribers are more intent than ever on fire prevention.

Death of Abner P. Bigelow

A. P. Bigelow, one of the best-known members of the lumber trade of New York City, head of A. P. Bigelow & Co., retailers, died July 24 at Hartsdale, N. Y., in his sixtieth year. Funeral services were held at Hartsdale on July 26, and no greater testimony to his popularity could be given than the large number of business friends in attendance.

A. P. Bigelow began in the lumber business at Rochester, N. Y. It was at Rochester that he first entered the trade on his own account. He entered the ranks of the Metropolitan district trade as a partner in E. H. Ogden & Co., and continued until 1893, when he sold his interest. After two years of inactivity, in 1895 he launched in business with yard at Fifty-third street and East river. In a very short time the house had come to be one of the representative ones of the district and the business grew steadily. Charles Grosskurth was admitted to partnership in 1905 and the style became A. P. Bigelow & Co. Two years later the yard was moved to 605 West Fifty-fourth street, the present location.

Captain Bigelow was active in the work of the New York Lumber Trade Association, being for many years, up to his death, a trustee and prominent in committee work. A committee representing that organization was present at the funeral services.

He is survived by a widow and two daughters.

Large Tie Order

The Chicago & Northwestern railroad has just let a contract for 400,000 ties to be cut in the state of Wyoming. The Wind River Timber Company is the contracting party, which has purchased 125,000,000 feet of timber on the Wind River national forest. Camps will be established at once and operations begun in order to make the first delivery on Oct. 1. The timber purchased is principally Douglas fir and pine.

Rock Castle Lumber Company Purchases Timber

The Rock Castle Lumber Company of Huntington, W. Va., recently purchased between 7,000 and 8,000 acres of hardwood stumpage on Coldwater Fork and Rock Castle creek, Martin county, Kentucky. The construction of ten miles of railroad and fifteen miles of logging road will be necessary immediately in order to log the 30,000,000 feet of stumpage which will be milled at the company's plant near Delong, Ky.

New Plant for William Horner

Ground has been broken at Newberry, Mich., for the new hardwood flooring plant of William Horner, who is now operating a big factory at Reed City, Mich. F. A. Horner of Grand Rapids, Mich., has the contract for the erection of the building. The main building will be 70 x 220 feet and in conjunction will be dry kilns occupying space of 70 x 200 feet. Buildings will be of concrete, brick and steel construction throughout. Operations are being rushed with a view of opening the plant by the first of the year. It is expected that 100 men will find employment in the new factory.

Pertinent Information

Interstate Commerce Commission Adjourns for Summer

The Interstate Commerce Commission adjourned at the end of July for the remainder of the summer months, and it is expected that there will be no further hearings before October. This adjournment does not necessarily mean, however, that the affairs of the Interstate Commerce Commission have come to a complete halt for that period for, as is usual, several of the members have hearings scheduled for other points than Washington, some as early as the first of September.

An investigation of the recent bond issue of the New York Central lines was one of the last acts ordered by the commission before adjournment. The accountants working under the commission's orders will be busy until the time for the hearing in the future, gathering evidence and information having to do with the case.

The adjournment affects the lumber trade immediately in that no decision was handed down regarding the petition of Memphis exporters for annulment of the increase in lumber rates from Memphis to New Orleans from ten to twelve cents. In addition many other complaints are booked for hearing as soon as the commission can get to it, among them being hearings on the yellow pine blanket rate case, protests of southern cypress and hardwood manufacturers, and the protest of the Iowa State Commission against the annually recurring car shortage in that state.

Chattanooga Lumbermen to Present Local Case

The Interstate Commerce Commission is scheduled to hear the so-called A. G. S. rate case in September at Chattanooga, Tenn. The case has to do with the action of the Alabama Great Southern railroad in recently submitting considerably increased tariffs on logs and lumber between way stations and Chattanooga. Through the Chattanooga Manufacturers' Association, the Chattanooga lumber trade entered a protest with the Interstate Commerce Commission, which granted a suspension. The lumbermen's side of the case will be presented by O. L. Bunn, secretary of the Chattanooga Manufacturers' Association. Mr. Bunn expects that the lumbermen's side will win out, as he has prepared a remarkably strong case.

Record for National Forest Sale

For the fiscal year ending June 30 the sale of timber and receipts from other sources to the Forest Service in connection with the national forests broke all previous records, approaching $2,500,000. About half of this amount was realized from the sale of timber and in addition $4,000,000 has been contracted for, the timber to be cut either in the immediate future or in the next few years. The states, according to the present laws on this subject, will receive thirty-five per cent of the gross receipts, which will amount to $800,000 or $900,000.

The sale of government timber is always an uncertain question, being effected largely by the general condition of the country's business. Thus the record established during the fiscal year just ending would indicate that generally speaking business conditions were good during that period. For the fiscal year ending June 30, 1906, which was the first year after the Forest Service was put in charge of the National Forest, the total receipts were but $250,000. For the next year, $700,000 was received, and in 1908, $850,000. There was a decrease of $100,000 the next year, which was made up, however, in 1911, when the total receipts were over $1,000,000. The sales of government timber in 1912 aggregated $1,100,000 as compared to $1,250,000 from the same source during the fiscal year just closed.

Faults of the Fiber Box

An abstract of the evidence recently introduced by the lumber and wooden box interests at Los Angeles and Chicago in what is known as the Pridham case, has been published in a volume of several hundred pages, known as Interstate Commerce Commission Docket, No. 5273. The importance of this investigation is now recognized all over the country. It began in an action brought in California before the Interstate Commerce Commission to compel the railroads to carry merchandise in fiber boxes east from the Pacific coast at the same rate at which wooden boxes and their contents are carried. The bringing of the case before the commission afforded the wooden box people and the lumber interests generally, an opportunity to present evidence to show that the fiber box should not have as low a rate as wood, for various reasons which are given fully in the testimony. The case, therefore, became a contest between the wooden and the fiber box, as to which is best as a container for merchandise in transportation.

Little was said to the disparagement of the wooden box. It was taken for granted and was admitted that it is satisfactory when well made; but the point which the lumber interests insisted upon was that the fiber box is inferior, and is generally unsatisfactory as a shipping container. Evidence, consisting of photographs and verbal testimony, was introduced to prove that the fiber box is weak and does not protect the contained merchandise; it crushes under ordinary shipping conditions; is easily torn by contact with the usual commodities found in miscellaneous freight shipments; offers little protection against the pilferer, who can open the ordinary package with a knife, or his foot, or his fist; and in case of dampness from leaky cars or other causes, the fiber box collapses. It was shown that claims against transportation companies on account of loss and damage of merchandise in transit have greatly increased since the fiber box came into extensive use. The weak containers are more expensive to handle than wooden boxes, because extra care must be given them. The conclusion is suggested that public carriers are justified in charging more for transporting fiber boxes than is charged for wood, and that all roads ought to charge more.

The testimony of many witnesses indicated that about one-fourth of the boxes used in transporting merchandise are fiber. This does not include barrels, bales, and crates. The material of which fiber boxes are made consists of paper, straw, jute, and hemp, pulped and pressed into sheets of pasteboard before being manufactured into boxes.

The Interstate Commerce Commission has not yet announced its decision in the matter. The fiber board interests have put up a stiff fight to keep the ground they now hold. The lumbermen are interested because wooden box makers are large buyers of lumber. The yearly purchases for that purpose are probably four or five billion feet.

Clyde's Special Messenger

The above is the title of a publication just begun by the Clyde Iron Works of Duluth. The first issue describes and illustrates the new Clyde overhead cableway skidder. The publication is attractive in its character and the nature of the reading matter it contains is in conformity with the live policy of the Clyde Iron Works.

The advantages claimed for the new cableway skidder described include the fact that its first cost is only three-fourths as much as that of its nearest rival. In addition the construction is metal throughout. The crew required for successful operation is only six men—half the usual number. Furthermore, only one main cable is required, which is self-contained on a steam-driven drum. The new machine is entirely self-contained and self-propelling, having a power sufficient to propel twice its own weight up a ten per cent grade.

Difficulty in Financing Chestnut Blight Investigation

The appropriation of $275,000 made in 1911 when a commission was created and 200 men were engaged for inspection of the chestnut tree blight, the study of the disease and the methods of treatment, having been pared down to $100,000, Governor Tener of Pennsylvania vetoed it on the ground that $100,000 was not adequate for the amount of work required. It is suggested by the created commission composed of Winthrop Sargent, Haverford, chairman; Harold Pierce, Haverford, secretary; Theodore N. Ely, Bryn Mawr; George F. Craig, Rosemont, and Samuel T. Bodine, Villanova, that if the appropriation under the law could be transferred to the State Forestry Department, this department might carry on the fight under the reduced figures with profit, as the State Forestry Department would not be at the expense of supporting a separate organization. Mark A. Carleton, Philadelphia, was general manager, and Samuel B. Detwiler of Bala, superintendent of the commission.

Canada's Pulpwood Production

The Department of the Interior of Canada has published a bulletin showing the production of pulpwood in 1912. The statistics were compiled by R. G. Lewis and W. G. H. Boyce. There were 866,042 cords reported for home consumption, at an average cost of $6.02 per cord. Of this amount Quebec is credited with 578,855 cords, Ontario 173,903, New Brunswick 52,041, British Columbia 35,067, and Nova Scotia 26,176. The number of cords of different woods follows: Spruce 677,747, balsam fir 164,-

587, hemlock 19,178, cottonwood, aspen, etc., 4,405, larch 85, pine 40. The pulpmills in Canada produced 682,632 tons of pulp in 1912, which was an average of 11,377 tons per mill. In addition to the above, Canada exported 980,868 cords of pulpwood, valued at $6.82 per cord; and 295,449 tons of pulp were exported, at an average value per ton of $17.10. The United States took 62.9 per cent of it, Great Britain 36.8 per cent. and the small residue went to Japan, China and New Zealand. Canada imported pulp worth $172,797 during 1912.



ORIGINAL STRUCTURE BUILT NINE HUNDRED YEARS AGO, ILLUSTRATING WOOD'S DURABILITY

Durability of Wood

Cases are cited from time to time which illustrate the durability of wood when exposed to weather. It is well known, of course, that wood protected from weather will never decay though it may wear out or be destroyed by mechanical means, as when worms and ants bore it. A remarkable celebration was recently held near Ongar, Essex county, England, to commemmorate the nine-hundredth anniversary of the building of Greensted church. The edifice is still standing, and the accompanying picture of it was drawn 165 years ago, and is here reproduced from Green's history of England. Some remodeling and repairing has been done in recent years, but the old timbers have been retained, particularly those forming the wall, which stand on end like palisades, as clearly shown in the picture.

The church was built by the Saxons before the Norman conquest. The logs which stand on end are English oak. Nine centuries have weathered their surfaces and made them as rough as the bark of the trees when standing in the forest; but decay has had little effect. Few instances are known where wood exposed to weather has remained sound so long.

The picture of the church might convey the impression that it is a tolerably large structure. It is smaller than the picture indicates. The main building is thirty-five feet long and fourteen feet wide. The height is not given, but the upright timbers forming the wall, as shown in the picture, are about five feet high. By comparing these uprights with the hight to the ridge of the roof, it is seen that from the ground to the peak of the roof is only about twelve feet. Greensted church, therefore, is quite a tiny affair, looking more like a toy than a church.

It was built hurriedly in the year 1013 as a resting place for a single night only of the dead body of King Edmund while being transported by slow marches from London across the country to the cemetery selected for the king's final resting place. The church was probably built in a few days. The walls of upright logs were of split oak, ranging in width from seven to seventeen inches. The round sides are placed outward. A large number of wooden pins were used in the church's construction.

Two additions have increased the size of the original edifice, but both are several hundred years old. The tower and the chancel at the opposite end of the building are the portions that have been added.

Wood vs. Steel-Built Vessels

A writer for the Pacific Coast Lumber Trade Journal of recent date cites a very striking example proving the superior safety to shipments in wooden vessels as against shipments in steel-built vessels. The merits of the two types of vessels are illustrated in the fate of the wooden schooner Lyman B. Foster and the steel schooner Americana, both of which sailed from the North Pacific coast with cargoes of lumber, were hit by terrific storms near the Tonga Island group in the South Pacific, and while the Foster was completely wrecked, her entire crew was saved. Nothing has been heard of the Americana, and it is suposed she went down.

The Lyman B. Foster cleared from Bellingham, Wash., Feb. 20, with a cargo of lumber for Levuka. The Americana cleared from Columbia river for Sydney, with a similar cargo, on March 1. The two vessels were in company for twenty-seven days and crossed the line at 147 degrees west on the Americana's twenty-third day out. The two vessels then parted, and nearing the Fiji group, the Foster was caught in a hurricane and wrecked, but kept afloat for more than fifteen days, enabling the crew to signal a passing vessel.

The American has never been heard from. The latter ship was about 900 tons gross register and was built in 1892.

Lumber Trade with Spain

A recent consular report shows that the United States is slowly increasing its shipments of forest products to Spain. That country has very little merchantable timber and must procure supplies from other countries. The most important of its forest products is cork, which is the bark of an oak tree. The value of the Spanish cork sold to dealers in this country exceeds the lumber shipped to Spain from the United States, but falls much short of all forest products combined. The wood products exported from this country to Spain in 1911 were as follows: Barrels, $79,984; firewood, $30,303; staves, $662,991; planks, $1,211,985; all other $12,582. The cork imported from Spain was worth $1,355,036.

A Curious Formation of Heartwood

The accompanying illustration shows a transverse section of the trunk of a pear tree. The dark star-shaped portion at the center is the heartwood, the five projections of which were induced by blazing the trunk at five points at equal distances above the ground, when the tree was only about two inches in diameter. The cambium or growing tissue between the wood and the bark having been removed, the woody portion of the stem between the blazed surfaces and the normal heartwood received no further nourishment from the distributing tissue in the bark, and being exposed to the air soon dried out and ceased to function in carrying sap from the roots to the leaves. It consequently turned darker, as is the case of normal heartwood formation. The wounds healed in the regular manner, and the peculiar star-shaped heartwood remained as an indelible record of the blazing which was no longer visible on the stem of the tree.



FREAK FIGURE IN HEART OF PEAR WOOD BOLT

Australians Destroy Timber

The forester of New South Wales, Australia, has published a report on the timber resources of that region. It sounds remarkably like many reports which have been published in this country concerning forest conditions here. It is a story of waste and destruction of valuable timber in the process of clearing land. This has been going on during sixty years, the settlers moving constantly farther inland in search of good land. That is the class of land on which the best timber grows, and since settlements nearly always move much in advance of lumber markets, there was little sale for the timber cut from the land. It was rolled into heaps and burned, just as was so often done in this country. It is estimated, in the report dealing with the matter, that three feet of timber have been destroyed for every two feet used; and at the same time Australia was importing lumber from distant countries to supply its people. Much of the best has been destroyed, and scrub growth remains over large areas. Commendable efforts are now being made to save what is left. In this matter Australian history is repeating American history.

A Great Traveler

The English are not much given to boasting but some of their papers have recently commented on the great distance traveled by a leather belt in its ordinary course of business in driving machinery at Smethwick. The belt has been going round the pulleys for thirty-two years, from nine to twelve hours a day, at the rate of 1,800 feet a minute. Some one with a mathematical turn of mind has figured that this equals 1,850,000 miles, or enough to make four trips to the moon and back. This beats the record of a battered suit case exhibited a few years ago in the window of a trunk store in Washington, D. C., with the card: "This suit case has traveled more than a million miles." The belt in England and the suit case in Washington were both of leather.

The New Illinois Compensation Law

The Lumbermen's Mutual Casualty Company of Chicago has just issued an explanatory pamphlet describing in detail the new Illinois workmen's compensation act which became effective July 1. The pamphlet is supposed to be for the benefit of employers and to enable them to pass judgment upon the act and to determine whether or not they want to accept its provisions.

According to the pamphlet, in an extra hazardous employment an employer, whether under the present act or not, need give no notice in order to operate under the new act, but must give notice if he wishes to reject it. In other employments notice must be given if the new act is either accepted or rejected. Briefly stated, the changes from the present act are as follows:

The new act includes employes of the state, county, cities, etc., permitting industries not classed as extra hazardous to accept its provisions. There is no assumption of acceptance for non-hazardous employment.

The act excludes casual employes and those not engaged in the business of the employer, such as domestic servants.

Where employer and employe accept, the employe retains no option to sue under the common law.

Only widows and children dependent upon deceased can receive payment in case of death, or other lineal heirs if the deceased had contributed to their support during the previous four years.

Specific injuries under the new act require specific indemnity, a schedule of which has been prepared. A definite limit of eight weeks and $200 for surgical and hospital after treatment are provided.

The manner of computing the basis of wages upon which to base indemnities is clarified and fixed definitely.

Commutation to a lump sum when ordered by the industrial board on a proper showing requires deduction for interest in order to establish the present value of the pension award.

The employer has the option of commuting periodical payments according to the award to a lump sum, based on the present worth, or to purchase an annuity, and in either case is thereby relieved from liability.

Lack of notice as soon as practical after an accident and within thirty days thereafter is a bar to recovery.

Unsanitary conduct or refusal to take proper treatment prejudices the right of the employe to compensation.

Indemnities in case of insolvency are made junior to mortgages or trust deeds on employer's property.

The employer can be required under penalty to satisfy the industrial board of his ability to pay the nominal requirements of the act.

An industrial board for the state as a whole appointed by the governor is provided for, to unify and control the administration of the act and elaborate provisions are made to govern it.

Manufactures of Wood Sold in Turkey

A consular report of recent date says that in the house-building and house-furnishing lines, American manufactures, both of hardware and of wood, stand a particularly excellent chance. To those products may be added prepared paints, varnishes and putty. The American trade with Turkey in doors, sash and blinds is small, aggregating $3,416, but, beginning in 1911-12, it is also new. Of furniture the United States sold $49,919 worth in 1911-12 as against $26,178 worth during the previous fiscal year. Of all other manufactures of woods, $22,200 worth was sold as against $16,266 in 1910-11. Steps have recently been taken by the consul general in Turkey to introduce into that country American lumber on a large scale, both for furniture and construction. Among the woods that find ready sale are red gum and yellow pine in lumber, mahogany and birch in veneers, and oak and maple for flooring.

Longleaf Pine as a Fire Tree

Dr. Roland M. Harper, in his recent report on the forests of Alabama, has a favorable word to say for forest fires, in relation to longleaf pine. "If it were possible," says he, "to prevent forest fires absolutely, the longleaf pine, our most useful tree, would soon become extinct." He thinks that fires visited the region periodically in prehistoric times, the same as at present, and to that condition the mature pine forests owe their existence. A portion of his argument in support of his theory is as follows: "Fire consumes the herbage that covers the ground, and prevents the growth of most thin-barked trees, but does very little harm to the longleaf pine after it reaches the age of four or five years. This pine withstands fire better than any other tree we have, but some of the other pines and a few of the oaks and hickories are not much inferior to it in this respect. Where the herbage has not been burned most of the pine seeds lodge in the grass and fail to germinate, and if the oaks and other hardwoods were allowed to grow densely, they would prevent the growth of the pine, which cannot stand much shade, especially when young."

The fact has long been recognized that certain trees owe their importance to forest fires. Lodgepole pine of the western mountains, paper birch of the North, and wild red cherry are examples. Their seeds must have bare soil or their germination is very low; but after a fire passes, the seedlings often take possession of extensive tracts. The lodgepole pine and paper birch, when once started, are usually able to crowd all other trees out. In this they differ somewhat from longleaf pine, which cast so little shade, on account of thin stand, that other trees are able to gain a foothold, and may ultimately crowd the pines out, if the periodic fires do not visit the forests, kill the other trees, but spare the thick-barked pines.

Railroad Valuation Will Be Expensive

It is estimated that the proposal to place a physical valuation upon the railroads of the country will cost the government between $10,000,000 and $15,000,000 and that the actual work will cover a period of six or seven years. The Interstate Commerce Commission has asked of Congress that it grant an immediate appropriation of $1,500,000 to provide funds for the purpose of organizing the engineering corp which will undertake the actual work involved. The house committee on appropriations was the recipient of a report which was based on a carefully worked-out estimate placing the cost of field work connected with the valuation at $1,921,500 a year.

According to the plan in mind, the country will be divided into five districts, each containing approximately 50,000 miles of railroad. It is estimated that it will cost each year for each of these districts for the expenses of the various groups of field squads, $384,300, making a total each year for the five districts of nearly $2,000,000. In addition the accounting which will be necessary will entail an expenditure of $350,000 a year and the valuation offices which will be maintained at Washington will require $150,000. The Interstate Commerce Commission expects that it will be well able to take care of the work and organize the field force through the Civil Service Commission by the first of next year.

To Forecast Dangerous Dry Winds

A western forestry and conservation association, representing the patrol organizations of the Pacific coast, has just been notified by the secretary of Agriculture that a plan for forecasting hot, dry winds conducive to forest fires, formulated jointly by the association, the Forest Service, and the Portland office of the Weather Bureau, has been approved and that weather officials are being instructed to coöperate in perfecting a system for reports and forecasts to be issued from Portland and San Francisco. Most of the disastrous fires on the Pacific coast occur when a high pressure area in northern British Columbia and Alberta coincides with a low pressure area in the California region. The resulting wind is usually exceedingly dry and is very much dreaded by fire fighters in that section, as fires not thoroughly in hand are likely to be fanned beyond human control with tremendous rapidity. The proposition, if worked out successfully, should be of material assistance in combating forest fires in the northwestern forests.

Biltmore Doings and Changes in Curriculum

The July issue of "Biltmore Doings," published by the Biltmore Forest School, states that the students had a busy month. The activities were centered in the woods near the school camp on Lake Dayhuff on the holdings of the Cummer-Diggins Company of Cadillac, Mich. The students were guided in their inspection of the woods operations by David Davidson, woods superintendent for the Cummer-Diggins Company. The camps in this section are of semi-portable type, consisting of sections of flooring, walls and roof, each ten feet wide. A camp accommodating 100 men requires 65,000 feet of lumber and $1,500 to establish. It can be broken up readily and loaded onto cars for transportation to a new site.

The students were given many opportunities for observing modern steam sledding where the sleds are skidded with steam skidders. They are pulled to the landing two at a time over the sledding roads while being loaded simultaneously with two loading lines.

A considerable part of the time was spent in surveying under the direction of J. T. McDowell. Various instruments were used for the running of corners, laying out of curves, making of topographic maps, etc.

Among the visiting lecturers were Professor H. A. Allison of the University of Missouri, who talked on "Animal Husbandry;" Dr. Hermann von Schrenck, who talked on "Timber Impregnation;" R. S. Kellogg, who gave the students many new ideas in lumber statistics.

The students left the woods of Michigan on Aug. 2 and, after visiting the mills and factories in Cadillac, proceeded across the continent via northern Idaho to Portland and Marshfield, Ore.

Dr. C. A. Schenck, director of the school, has issued announcements considerably amplifying the announcements contained in the last issue of HARDWOOD RECORD as to the change in curriculum. Briefly, these changes embody change from a one to a two-year course, the elimination of the European trip for active students, the elimination of certain unimportant

subjects with greater attention to surveying and engineering, and the provision that students must find employment in the woods during the summer months, the school to be located one year in the West and one year in the eastern forests.

Participation in the European trips will be restricted to fifty men, and the trips are open to graduates of Biltmore Forest School, graduates of other American forest schools; national, state and municipal forestry officers, and all lumbermen and owners of timberland. The trip will include visits to the state communal and private forests in Prussia, Bavaria, Hessen and Baden, and will occupy between the time of departing from and arriving at New York City eight consecutive weeks from January to March of each year. The total expenses inclusive of everything from New York City and return will be $350.00.

Increasing Exports of British Guiana Timber

It will be of interest to note that the export trade in wood in British Guiana has increased considerably during the last few years. This has been principally to the United States, where the value of British Guiana woods seems at last to be receiving more recognition. Capitalists are pushing their enterprises in British Guiana and are not confining their trade to any one kind of wood, but are beginning to handle quite a large variety, some of it being suitable for cabinet and furniture work and others for interior finish of fine residences. Considerable construction timber was shipped, chiefly to England, during the last few years.

The total export of timber in the rough during 1911 was 237,681 cubic feet. During 1910, 216,887 cubic feet were exported.

Quantities of greenheart, crabwood and mahogany are now shipped in the form of lumber. The lumber exports during 1911 aggregated 385,615 board feet. Only 281,668 board feet were exported during 1910.

The comparison with regard to the following articles of the British Guiana's exports are as follows:

	1909-10.	1910-11.
Shingles	2,365,600	2,955,500
Railway sleepers	2,850	13,214
Firewood (tons)	9,673	10,228¾
Charcoal (bags)	78,231	79,344
Wallaba and hardwood posts	4,750	6,337

Wisconsin Forest Fires Light

Although the forest fire danger in Wisconsin is not over and the greatest danger is in fall after the leaves have fallen and the country is dry, it is believed that this year's losses will be lower than in previous years. Up to date there have been no large losses as a result of fires in the forest reserve in northern Wisconsin, although there were a few fires during the dry periods of May and June. State Forester Griffith reports a heavy loss as a result of forest fires during 1908, 1909 and 1910. In 1909 fire swept 166,000 acres of land, resulting in a loss of $104,000, while in 1910 the fire extended over 892,000 acres, the loss aggregating $5,343,000. Since then the state has been more fortunate and the fire loss has been greatly reduced. This is due in a measure to the system of protection that has been developed. The forest reserve is divided into townships. Each township is made up of an area of six square miles and has a ranger constantly on the lookout. These townships are connected by a system of roads, trails and fire lines, and the various fire stations by telephones. Five steel lookout towers have been erected. News of a fire is promptly spread over the entire district and preparations are made to fight any conflagration. The state has eleven rangers, twelve men constitute the federal patrol and five are paid by private parties. The theory worked on in dividing the reserve into districts is, if possible, to keep the fire within the smallest possible area when it breaks out.

Hydroelectric Power Development

The development of electricity by water power is rapidly assuming enormous proportions in this and other countries. The great plant at Keokuk, Iowa, by which the Mississippi will drive the street cars of St. Louis, is about ready for business. A plant which will develop as much power as the whole Mississippi at Keokuk, but use only one one-hundredth as much water, is nearing completion in California, and will furnish power for all purposes in Los Angeles, 300 miles away. Work has begun on a plant in Finland which will supply power to St. Petersburg. In Switzerland electricity will soon be generated under a "head" of 5,360 feet. The water will fall more than a perpendicular mile, and will strike the wheels with a force of 2,475 pounds per square inch. These enormous plants have markets for their electricity; but the largest of all is building in the interior of Iceland, 600 miles from the nearest inhabited land—except the natives of Iceland itself and a few in Greenland. The factory in far-away Iceland will extract nitrogen from the air and sell it for fertilizers.

Paper and Wood Pulp Industry

The Bureau of the Census has published a report on the manufacture of pulp and paper in the United States for 1909. A considerable part of the data was published in the "Forest Products of the United States, 1909," issued more than two years ago; but the present publication includes additional statistics.

There were 777 establishments in the United States in 1909 engaged in the manufacture of paper, and eighty-one made pulp. The number of persons employed was 81,473, and their annual pay was $50,314,643. The cost of the materials used was $165,442,341, and the value of the product was $267,656,964.

Paper was manufactured in this country near Philadelphia as early as 1690. The growth of the industry, however, was slow until within the last forty years, during which time the introduction of improved machinery and the use of wood fiber as a material have brought about a remarkable growth in the industry. In the decade 1899-1909 the value of products increased $140,330,802.

Thirty-one states are represented in the paper and pulp industry. New York leads, Massachusetts follows, and Maine is third. Michigan, Virginia and West Virginia show the most rapid increase.

Spruce, poplar (aspen, balm of Gilead, etc.), and hemlock are used in larger amounts than any other woods. The total amount of pulp used in the paper mills in 1909 was 2,826,951 tons.

Of the 4,216,708 tons of paper of all kinds manufactured during the year 1909, 1,175,554 tons, or 27.9 per cent, was news paper. Book paper formed 16.5 per cent; cardboard, 1.2 per cent; fine paper, 4.7 per cent; wrapping paper, 18.1 per cent; boards, 19.7 per cent; tissue paper, 1.8 per cent; blotting paper, two-tenths of 1 per cent; building (roofing, asbestos, and sheathing) papers, 5.4 per cent; hanging papers, 2.2 per cent; and miscellaneous paper products, 2.3 per cent.

First Sawmill in Mukden

A recent consular report gives an account of the first sawmill installed in Mukden, Manchuria. A Japanese has set it up and is operating it. The power is supplied by the city electrical power plant, and in that respect the mill is up-to-date; but it is primitive in other particulars. For instance, the mill has no log carriage. The log is pushed and pulled by hand power forward and backward in cutting boards. Crude though that method is, it is an improvement over the common way of sawing lumber in that region, where the whip saw, operated by hand power, is used.

Farm Implement Prospects in India

American manufacturers of agricultural implements ought to profit by the change in methods of working land now taking place in India. The change is just beginning and it will be very slow; but a great deal is involved. India's hundreds of millions of people have cultivated the soil from time immemorial, and have used the most primitive tools. There was scarcely any change in methods from the time of Alexander the Great until a few years ago. It takes four hundred men with their crude and antiquated tools to produce as much rice in India as one man with modern tools can grow in Louisiana. It is much the same with other grains.

U. S. Consul Henry D. Baker in a recent report to this government described the tendency to break away from the slow methods of the past and take up agriculture according to modern ways. The change, however, will not be sudden. It must be brought about a little at a time. The tillers of the soil in India are very poor and few of them are able to buy machines, and such as can buy them do not know how to use them.

The British government in India has established depots and is assisting the natives to buy and to use modern farm machinery. The assistance thus far has been small. It consists in loaning a little money to those who wish to buy machinery and who are considered responsible; but that is not the end of the assistance given. The buyer is carefully instructed how to use the machine he buys. Instruction is given also to prospective purchasers.

The government agents investigate various implements on the market and decide which are best adapted to the various districts of India. In some instances the government manufactures implements and sells them to the natives; other implements are bought by the government agents from the manufacturer, and resold to the natives; and sometimes an order from a native farmer is simply passed on to the manufacturer with the request that he deal directly with the prospective purchaser.

"The work of the various state farm-implement depots," says the consular report above referred to, "deserves the serious attention of American manufacturers who wish to find a good field in India for the sale of their implements, for it is apparently only possible, at present at least, to gain much success in this market by working in co-operation with these government depots and securing official approval and patronage of the various implements whose sale here is desired. The officers of these implement depots should be kept in close touch with, and their suggestions and criticism should be earnestly considered if any great measure of success is to be expected."

Silk Made of Wood

At a recent forest products exhibit in Philadelphia considerable interest was shown in a sample of wood silk. Although it might readily pass for the genuine article, there was not a thread of real silk in it. They were wholly of wood. The article is not a new invention, but has been known for a number of years. It has never become commercially important. The wood is reduced by chemical means to a viscous mass and is then drawn into threads which look like silk. They may be woven into cloth, but its wearing qualities lack much of equaling the genuine article.

Forestry on Lighthouse Land

The United States Lighthouse Bureau and the Forest Service are cooperating to the extent that the reservations on which government lighthouses are standing along the shores of the Great Lakes will hereafter be supervised, as far as their standing timber is concerned, by the Forest Service. The lighthouse reservations along Michigan and Wisconsin shores include a total of 5,500 acres. An examination is just being started to determine the best methods to pursue.

Valuable Collection of Wood Specimens

HARDWOOD RECORD office is fortunate in having just received a set of wood specimens representing seventy leading commercial species found in the United States. The specimens are all properly labeled, are of ¼" thickness and 2" x 3" in dimensions. They are all evidently cut from forest growth trees, which offers something new in this line, as the usual wood specimen is cut from scattering, shade tree growth and does not illustrate the true character of the wood.

Building Operations for July

Building conditions throughout the country for July were practically the same as for June. The official reports of building permits issued by 60 cities, received by the American Contractor, Chicago, reach a total value of $56,228,194 for the month, compared with $66,245,719 for July, 1912, a decrease of 15 per cent. The July statement is a shade better than that for June, which showed a decrease of 16 per cent. Of the 60 cities, 34 show a decrease in activity, the balance a gain. Among the cities that make the more notable gains for the month are Cleveland, 49 per cent: Dallas, 132; Harrisburg, 153; Hartford, 58; Seattle, 119; Tacoma, 267; Troy, 199, and Wilkes-Barre, 198. The heavier losers comprise Atlanta, 58 per cent; Baltimore, 49; Chicago, 41; Cincinnati, 40; Des Moines, 71; Duluth, 51; Memphis, 55; Milwaukee, 40; Nashville, 59; Richmond, 89; Rochester, 45; Salt Lake City, 64; San Francisco, 42; South Bend, 72; Springfield, 70. It is interesting to note that New York makes the best statement in several months, a loss of only 9 per cent. The heavy shrinkage at Chicago was due to the idleness of the building trades.

For the seven months ending July 31 the building permits issued in 57 cities reached a total value of $385,204,400, compared with $357,575,331 for the corresponding seven months last year, an increase of 8 per cent. Details are as follows:

City.	July, 1913.	July, 1912.	Per cent. Gain.	Per cent. Loss.
Akron	$ 707,265	$ 664,130	6	
Albany	315,770	419,241		25
Atlanta	434,943	1,039,551		58
Baltimore	394,089	781,909		49
Bridgeport	193,027			
Cedar Rapids	319,009	315,450	1	
Chicago	6,035,000	10,265,800		41
Cincinnati	582,430	971,214		40
Cleveland	2,746,360	1,828,201	49	
Columbus	421,945	423,883		1
Dallas	806,250	347,700	132	
Denver		454,020		
Des Moines	731,164	458,650		71
Detroit	2,646,455	2,038,255	30	
Duluth	236,413	481,015		51
Evansville	122,990	85,312	44	
Grand Rapids	242,782	204,998	18	
Harrisburg	409,055	161,625	153	
Hartford	970,055	675,550	58	
Indianapolis	1,120,566	1,280,512		12
Kansas City	857,475	884,396		3
Los Angeles	3,324,214	3,585,014		7
Manchester	162 035	194,248		17
Memphis	304,266	680,629		55
Milwaukee	7,817,077	3,021,476		40
Minneapolis	1,054,970	879,965	20	
Nashville	56,055	138,707		59
New Haven	364 486	334,305	9	
New Orleans	563,500	379,296	46	
Manhattan	9,155,641	7,149,339	28	
Brooklyn	2,896,035	3,962,534		27
Bronx	1,300,139	3,591,495		64
New York	13,351,816	14,703,368		9
Oakland	660,588	1,010,444		35
Omaha	392,525	569,329		31
Paterson	253,590	212,610	19	
Peoria	199,375	244,690		18
Philadelphia	3,480,700	3,456,800	1	
Pittsburgh	777,128	1,186,745		34
Richmond	147,435	1,334,096		89
Rochester	511,733	931,166		45
St. Joseph	57,409	92,373		38
St. Louis	1,045,730	1,724,665		39
Salt Lake City	149,740	420,185		64
San Antonio	244,965	215,695	14	
San Francisco	1,415,819	2,452,725		42
Scranton	133,510	124,627	7	
Seattle	1,414,620	645,325	119	
Shreveport	158,361	119,569	32	
Sioux City	175,000	204,490		14
South Bend	57,820	213,798		72
Springfield	81,075	275,175		70
Syracuse	341,275	349,775		2
Tacoma	529,599	144,194	267	
Toledo	671,605	637,980	5	
Topeka	115,177	78,882	46	
Troy	167,840	56,215	199	
Washington	633,725	879,941		28
Wilkes-Barre	633,449	212,603	198	
Worcester	385,999	652,192		41
Total	$56,228,194	$66,245,719		15

Hardwood News Notes

MISCELLANEOUS

The Northern Casket Company of Fond du Lac, Wis., has increased its capital stock to $200,000.

The Lulu Iron and Lumber Company has incorporated at Sanford, Me., with $300,000 capital stock.

The Pickrel Walnut Company of St. Louis, Mo., has increased its capital stock from $40,000 to $50,000.

The Home Furniture Company of Longview, Tex., has increased its capital stock from $12,000 to $20,000.

The Ross Cabinet Company of Otsego, Mich., is reported to have increased its capital stock to $70,000.

The Wayne Chair Company of New Haven, Ind., recently lost its plant by fire. It does not expect to rebuild.

The Hackney Wagon Company of Wilson, N. C., is reported to have increased its capital stock to $200,000.

The Litton Veneer Company has started business at Rockford, Ill., with an authorized capital stock of $10,000.

C. A. McGrew of the Evansville Coffin Company of Evansville, Ind., has sold out his interest to E. M. Burtis.

The Atlantic Coast Vencering Company has been incorporated at Wilmington, N. C., with a capital of $50,000.

The Taylor Land & Lumber Company has been incorporated at New Albany, Ind., with a capital stock of $10,000.

The Harrisburg Wood Manufacturing Company has been incorporated at Harrisburg, Va., with a capital stock of $35,000.

The Oneida Wood Pulley Company of Oneida, N. Y., has been incorporated with an authorized capital stock of $25,000.

The Bausch Picture Frame & Moulding Company of Farmingdale, N. Y., has sustained an involuntary petition in bankruptcy.

The People's Supply Company is the style of a new concern starting business at Dierks, Ark., with a capital stock of $20,000.

The D. H. Gowing Veneer Company of Burnsville, W. Va., recently organized. The capital stock of this company is $50,000.

The Main Furniture Company of Hagerstown, Md., has been incorporated under the same name and now has a capital stock of $50,000.

The Thomas Powers Company has been organized at Cape Girardeau, Mo., for the purpose of manufacturing wood advertising novelties.

La Belle Funeral Motor Car Company is the style of a recently incorporated concern at Detroit, Mich. This company has $25,000 capital.

The John J. Raab Chair Company of Grand Rapids, Mich., has purchased a factory site in that city, where it will shortly begin the erection of a new plant.

The report that the A. L. Dennis Salt & Lumber Company of Grand Rapids, Mich., had cut out its holdings in Dighton, Mich., is reported to be an error.

The H. D. Smith Company has been incorporated at Boston, Mass., for the purpose of manufacturing furniture. The capital stock of this company is $50,000.

The Parker Buggy Company of Suffolk, Va., which lost its entire plant by fire, is now rebuilding and expects that by the first of September it will be again operating.

The Babcock Manufacturing Company of Leonardsville, N. Y., recently suffered a severe fire loss, its entire plant being destroyed. It is at present planning to rebuild, with new equipment.

The Batesville Cabinet Company is the style of a new Indiana incorporation which has begun business at Batesville. The company is organized for the purpose of manufacturing dining room furniture.

CHICAGO

The Union Car & Equipment Company of Chicago has filed a bill for accounting and receivership.

Olson Brothers & Co. of Chicago are reported to have changed the name to Samuel Olson & Co., and to have incorporated with a capital stock of $35,000.

Leonard Peterson & Co. of Chicago have increased their capital stock to $50,000.

Wright & Craycroft of Chicago have incorporated under the style The Wright-Craycroft Company. The incorporation provides for a $20,000 capital.

W. D. Reeves of the W. D. Reeves Lumber Company of Helena, Ark., was one of the distinguished visitors to the local trade recently.

C. W. Kendall of the Nicholson-Kendall Furniture Company of Huntington, W. Va., was in the city for a few days recently.

J. F. McSweyn, president and manager of the Memphis Band Mill Company of Memphis, Tenn., was in the city most of last week on business.

R. S. Kellogg, secretary of the Northern Hemlock and Hardwood Manufacturers' Association, Wausau, Wis., passed through the city last week on his return from Cadillac, Mich., where he lectured to the Biltmore Forest School.

R. J. Lockwood of the Memphis Hardwood Flooring Company, Memphis, Tenn., spent several days of last week with the local trade.

L. W. Ford, secretary and treasurer of the Goodlander-Robertson Lum-

ber Company of Memphis, Tenn., made one of his regular visits to the local trade last week.

Theodore S. Woolsey, Jr., of the Forest Service, stationed at Albuquerque, N. M., was in the city for several days the early part of this week in conference with F. H. Smith, in charge of the Chicago office of the service.

A. V. Alexander of Little Rock, Ark., one of the old guard of the lumber business, spent several days of this week in Chicago visiting with his old friends among the local trade.

The Schiff Furniture Company of Chicago has increased its capital stock from $10,000 to $20,000.

NEW YORK

The George Webster Lumber Company, manufacturer and wholesaler of hardwood, headquarters Springfield, Mass., has reopened the local office at 25 W. Forty-second street with E. R. Plunkitt, manager, as formerly. The Webster company specializes in northern hardwoods, though it also handles much southern stock.

The Alabama Hardwood Lumber Company has been organized in New York City by J. W. Sweitgart, Philadelphia, W. W. Hess of Germantown and John McLaren of New York.

Owen M. Bruner of Philadelphia spent several days in town last week. Other visitors were Edward Hines of Chicago; F. L. Peck of the J. J. Newman Lumber Company, Scranton, Pa.; Hugh McLean of Buffalo and Richard P. White of Albany.

The Hilton & Dodge Lumber Company local office entertained at the launching of the company's tug boat, the Wm. B. Keene. The boat was named for Mr. Keene of the New York office and was christened by his sister, Miss Mary B. Keene. The Keene is specially built and will be used almost exclusively in towing the company's lumber barges between the southern shipping points and the markets of the north.

The Hudson Milling Company of Bayonne, N. J., has filed a petition in bankruptcy.

BUFFALO

The Atlantic Lumber Company has been receiving a large stock of hardwoods lately for its new quarters in the Scatcherd yard. Manager H. L. Abbott is making an automobile trip to New England.

The question of transit privilege on lumber has been uppermost again lately and the exchange has had a committee named to present its case to the railway men. On this committee were M. M. Wall, O. E. Yeager and A. W. Kreinheder, who expect to see results soon in the shape of some definite rules on lumber shipped in transit.

J. N. Scatcherd is in New York on a visit to relatives. J. Newton Scatcherd has been spending two weeks at the old home farm in the neighborhood of London, Ontario.

O. E. Yeager has completed the settling up of the affairs of the late F. W. Vetter, for whose estate he acted as administrator. Mr. Vetter's business was found to be in good shape.

Davenport & Ridley state that the trade is rather quiet, but not more so than usual in midsummer. The firm is shipping in a large amount of maple from Pennsylvania at present.

George B. Miller of Miller, Sturm & Miller, has gone again to the Adirondacks, where it is expected that a short stay will be of much benefit to his health.

H. B. Gorsline of the National Lumber Company office, left early this month for a two weeks' vacation trip to his old home at Battle Creek, Mich., and other points in that state.

I. N. Stewart & Bro. have had some call for mahogany lately, a wood which holds all its firmness. There has also been a fair sale for plain oak and brown ash.

PHILADELPHIA

F. X. Diebold, president of the Forest Lumber Company, says business varies but little from the usual summer volume. He reports a slight quickening during the last week, inquiries coming in more freely, and the outlook promising. A. J. Levy, of this house, is on a visit to company's mill at Konnarock, Va. He will make a tour of the North Carolina lumber camps sizing up the situation.

Charles K. Parry of Charles K. Parry & Co., sole representatives of the Carolina Spruce Company, Pensacola, N. C., recently spent some days at the mill. Just now he says the company is cutting spruce and getting out some of the finest stuff ever placed on the market. The mill is working full capacity.

Frederick S. Underhill of Wistar, Underhill & Nixon, reports a fairly responsive trading for this time of the year. R. Wyatt Wistar is visiting the company's mill at Sumter, S. C., and T. N. Nixon is on an order hunt through New England states.

The Pennsylvania Lumbermen's Mutual Fire Insurance Company held its semi-annual meeting of directors on July 22. Review of business for the half year gives satisfaction, considering trade conditions. Justin Peters, general manager, has established his family at Ocean City, N. J., for the summer, from which point he makes daily trips to the office.

Schofield Brothers, owners of the Saltkeatchie Lumber Company, Schofield, S. C., report normal summer business. Frank E. Schofield has just returned from a two weeks' vacation, much of which was spent among the Pocono pines and in other localities in Pennsylvania where beautiful timber abounds. John H. Schofield, whose family is at Ocean City, N. J., joins them every evening, returning to city for business in the morning.

Joseph L. Johnson, who has had charge of the office at the Schofield, S. C., plant, has been transferred to the Schofield Brothers end and will look after New York state territory.

John W. Floyd of the Floyd Lumber Company, who recently returned with a desirable bunch of orders from a week's stay in New York City, says things seem to be livening up there.

Daniel B. Curll is in Tennessee, where he has portable mills, hurrying up shipments. Orders have been coming in beyond expectation.

Edwin B. Malone of Watson, Malone & Sons, recently made an extensive tour of the southern lumber fields, acquainting himself with the situation there and at the same time laying hold of some desirable stock.

Horace A. Reeves, Jr., says business is running along fairly satisfactory for this time of the year. As far as he can see the outlook is favorable.

The Hallinger Planing Mill Company, Chambersburg, Pa., obtained a charter under Pennsylvania laws on July 22. It is capitalized at $80,000.

Samuel H. Shearer of Samuel H. Shearer & Son, and Mrs. Shearer have gone for a two weeks' recreation to Chebeague, Md.

BOSTON

Jennie S. Lawrence, wife of Frank W. Lawrence, of the well-known firm of Lawrence & Wiggin, died at their summer home in Swampscott, July 25.

The strike of the employes of the lumber mills at St. John, N. B., is still on, with no prospect of an immediate settlement.

Fire caused destruction to the sawmill of August Daigle at Soldiers Pond, Me., July 27. The loss is understood to be partially covered by insurance.

The deepest sympathy and hope for a speedy and successful recovery is being extended to James Manson, the genial manager of the Manson Lumber Company, East Boston, from the severe injuries sustained when an iron door fell upon him, breaking his collar bone, crushing two ribs, also crushing his right hand so badly that it was necessary to amputate it above the wrist. He is still at the East Boston Relief Hospital where he was taken for temporary treatment.

COLUMBUS

August 5 was the date set for the operation of the new mechanics lien law, which was passed by the last session of the Ohio General Assembly. After that date all men engaged in the building trade, lumbermen, material men and contractors must comply with the provisions of the new law which is not as drastic as was first believed. The required blank forms have been printed and information relative to the law has been published far and wide. The Columbus Builders' and Traders' Exchange is opening a bureau to supply information on the law to all of its members. The law provides that the owner must see that all bills for materials and labor are paid. The owner is protected through the affidavits of the various contractors and material dealers, which the law requires. Furthermore the owner cannot be made to pay any more than the contract price in any event. If the owner pays out any money without requiring the affidavits in compliance with the law, he does so at his own risk.

The annual outing and picnic of the Columbus Builders' and Traders' Exchange was held at Glenmary Park recently with about three hundred members and guests in attendance. One of the features of the outing was a baseball game between the traders and the builders, which was won by the former in ten innings by a score of 7 to 6. A number of freak races and contests were on the program.

For the third time in the past seventeen years the plant of the West Side Lumber Company of Dayton, O., was destroyed by fire, entailing a loss of about $100,000. The loss is partially covered by insurance.

Handle manufacturers of eastern Indiana and western Ohio met at Lima, O., recently to discuss trade conditions and take steps for exchanging stocks.

The planing mill of C. J. Miller, located at Smithville, O., was struck by lightning recently and totally destroyed by fire, causing a loss of $10,000.

W. B. Sissons, sales manager of the Sowers-Leach Lumber Company, says that considerable strength is shown in the hardwood trade with prices on all varieties and grades well maintained. Stocks in the hands of mills are not large.

R. W. Horton, sales manager for the central division of the W. M. Ritter Lumber Company, reports a good demand from factories and yards for all varieties of hardwoods. There is a good demand for quartered and plain oak as well as all items of chestnut. Poplar is also moving well. The outlook for the future is considered excellent.

L. B. Schneider, sales manager of John R. Gobey & Co., reports a good trade in all hardwoods during the past fortnight. Prices are well maintained and there is no disposition to shade quotations to move stocks. The prospects for the future are bright.

J. A. Ford of the Imperial Lumber Company, is another of the Columbus lumbermen who reports a good demand for hardwoods. One of the chief troubles is the inability to secure prompt shipments.

BALTIMORE

The managing committee of the Baltimore Lumber Exchange at its monthly meeting held on Aug. 4 discussed among other matters that of finding new quarters for its bureau of inspection, which will have to be moved because the building wherein it has its offices has been sold to a firm of spice manufacturers, which wants the room and is already making

MAHOGANY

Regarding a big shipment of high-grade, selected logs we are just receiving, our Liverpool brokers say:

"Our own feeling with regard to this purchase is that it is one of the finest ranges of logs we have ever sent to the United States; they are mostly Grand Bassam with a few Lagos and Benin."

Their judgment ought to be convincing, as they can't afford to make such statements without entire justification—it would not be safe.

This stock will be ready for your inspection, as veneer, in a few days.

We are also getting in a splendid lot of Circassian and a big shipment of White Oak that we can vouch for, as we selected it all ourselves.

Early Inquiry Will Give Best Selection

Fred W. Black Lumber Company
Chicago, Ill.

Take Douglas Park "L" to 40th Ave. and walk one block south

Knowledge Essential To Comparison

To the uninformed a few gnarled, stunted trees, feathered to the ground may appear as a magnificent forest. The uninformed have no standard for comparison.

Have you?

Are you familiar with forest growth in redwood, sugar pine, western pine, fir, spruce, cedar, with the white pine of the north, the longleaf and shortleaf pines of the south, with the hardwood forests of all sections?

Possessing this knowledge you are qualified to compare values. Not possessing it you need the service of someone who is informed to serve as your agent whether you contemplate buying or selling.

We, learned in the great school of practical work, have studied the business for thirty-five years and are studying harder than ever today.

Our corps of timber experts is at your service.

James D. Lacey & Co.

Timber Land Factors

Chicago, Ill., 1750 McCormick Building
Portland, Ore., 1104 Spalding Building
Seattle, Wash., 1009 White Building

the changes required to fit it for the new uses. The Coca Cola building, just across Concord street from the present place, has been under favorable consideration. Offices there will be just opposite No. 5 dock on Pratt street, one of the lumber wharves, with others only a short distance away, and are most conveniently situated.

Daniel MacLea of the Eisenhauer-MacLea Company, on South Central avenue ,has gone on a vacation with his family to Ocean Grove, N. J. His partner, G. W. Eisenhauer, is making trips to and from Blue Ridge Summit, in the Blue Ridge mountains, never being away from the office more than a day or two at a time.

Robert McLean, a hardwood exporter, whose affairs were placed in the hands of receivers several months ago, and who later went to Scotland to attend the funeral of his wife who had died rather suddenly, and to look after various other personal matters, is back and has started to take up once more the interrupted threads of business. The unsatisfactory character of the foreign situation is causing him to go slow, but by fall he expects to have made some definite connections.

John R. Warfield, Paul M. Wincow and Perry Warfield have incorporated the Mutual Lumber Company at Cumberland, Md., with a capital stock of $25,000.

The annual shipments of West Virginia spruce to South American countries by the American Export Company of New York, through the McCall-Dinning Company, ship brokers of this city, have begun. The first cargo to go out started last week on the Norwegian bark Killeena, which cleared with 36,422 pieces, or 650,522 feet, valued at $19,840. Other much larger cargoes will follow, all going to the River Plate, in which a considerable market has been developed for the wood. The Italian ship Buenos Ayres is now here to load, and will be followed by the Italian ship Ascencione.

Frank A. Parker of Mann & Parker, Inc., was on a selling trip to New York and other territory in that section recently. He states that the offerings have become more liberal, with consequent reluctance on the part of buyers to place orders, and some shading in prices.

F. W. Morehead of the Boice Lumber Company of Richmond, Va., was a visitor here two weeks ago, being on his way back from a northern trip, which he said had not been altogether satisfactory, inasmuch as he experienced the same holding back and increased competition by reason of larger offerings, reported by other hardwood men.

The United States Leather Company of Parkersburg, W. Va., has concluded the largest timber deal ever negotiated in that section. It includes 19,000 acres in Highland, Bath and Augusta counties, Virginia, and Pendleton county, West Virginia, and involves a consideration of not less than $350,000.

TOLEDO

The Keasy Pulley Company, after some business difficulties during which time the plant was closed down, has been reorganized by T. D. Keasy. The plant is now running full time with as many orders as can well be taken care of. The concern has orders enough ahead to keep the plant busy for some time to come.

The Gilbert planing mill at Smithville, O., was struck by lightning last week and in the fire which followed the mill and lumber yards were completely destroyed.

The Big Four Hardwood Company has leased its piano case factory to the E. W. Hurd Company of Detroit. The new concern has been in possession for about a month. It has plenty of orders and is running as heavily as conditions will permit. The scarcity of labor has been a great drawback and has deterred the running at capacity which would be advisable if men could be secured.

The Buckeye Furniture Company of Toledo has leased the new Hattersley block on Monroe street, to be used in connection with the present plant as a furniture warehouse and factory. The new structure will give the concern 20,000 square feet of floor space.

INDIANAPOLIS

The Sedalia Lumber & Coal Company of Sedalia, Ind., has been dissolved.

Building permits in the city last month amounted to $1,120,566 as compared with $1,280,512 in July, 1912.

Ed. W. Clark, who represents E. C. Atkins & Co. in New York, and Miss Bernice McCord were married at the home of the bride's parents in this city on July 31. They will reside in New York.

The Republic Construction Company has received an order from the Isthmian Canal Commission for 131,400 square feet of creosoted wood blocks to be used for floors in the government shops at Panama.

A wholesale and retail lumber business will be conducted at Knox by the newly organized Long-Thompson Lumber Company, which has been incorporated with an authorized capitalization of $15,000. Those interested in the company are J. W. Long, B. H. Thompson and C. M. Long.

The Showalter Manufacturing Company, manufacturer of automobile bodies, recently lost its plant by fire with a loss of $12,000, partially covered by insurance.

MEMPHIS

P. J. Walsh, representing the Kuntz Company, manufacturer of cabinets, with headquarters at Chaffee, Mo., was a visitor here recently. He said that it was surprising to what extent the increased use of gum had cut

down the available supply of this material. He also declared that the bulk of the supply of this wood was to be found in the states of which Memphis is the geographical and logical center. He talked with some of the leading red gum manufacturers here and said that he believed it would be possible for him to make arrangements to secure the needs of the big industry at Chaffee. He believes, however, that the rates on gum logs are too high and that, to largely increase the movement of gum timber to northern points, it will be necessary to secure some concessions from the railroads on this particular style of lumber. He left for Chicago with the avowed purpose of looking into the matter of lower rates on such shipments. The prospects, however, are not particularly bright in view of the recent granting of an advance of two cents per hundred pounds on shipments of gum from Memphis to New Orleans by the Interstate Commerce Commission.

The Kentark Land & Timber Company, with headquarters at Louisville, Ky., which recently acquired 24,350 acres of hardwood timberlands from the Union Land & Lumber Company, with headquarters at Pine Bluff, Ark., has taken out a charter under the laws of the last named state. It is set forth in the document that the company will employ $125,000 of is capital stock in the Rackensack state. It is to maintain its headquarters for Arkansas at Pine Bluff and is now planning the building of a big mill between England and Stuttgart, Ark., on Crooked Creek. The Kentark Land & Timber Company, it is reported, has recently acquired the controlling interest in the Varner Land & Lumber Company, which operates a large plant for the manufacture of southern hardwoods at Geridge, Ark., and which likewise owns 13,000 acres of timber lands in that section. The consideration paid for the 24,350 acre tract, which lies in Arkansas, Lonoke and Jefferson counties, is placed at $400,000.

The plant of the St. Louis Cooperage Company, located at Brinkley, Ark., has resumed operations after a shut down of several weeks during which numerous improvements were made, including the installation of new equipment. The engines and boilers were thoroughly repaired and overhauled.

Advices received here from Hunter, Ark., indicate that the five sawmills located at that point are doing a good business, with particular reference to oak, hickory, gum and ash, all of which are being actively manufactured and shipped.

It is definitely announced now that R. J. Darnell, Inc., will rebuild its band mill at Batesville, Miss. There was some discussion along this line following the fire, but it is only within the past few days that the firm has decided positively that the location of the plant will be changed. The main reason for this removal lies in the fact that the principal timber land holdings of this firm are located along the line of the Batesville Southwestern, of which Batesville is one of the terminals. The firm will rebuild its veneer plant at Memphis and the latter will have a complement of twelve machines, considerably more than were operated under the regime prevailing before the fire which burned both the band mill and the veneer plant. Much regret has been occasioned in hardwood circles over the removal of the band mill. R. J. Darnell, Inc., has had its offices in the Exchange building since the fire occurred.

The Moline Lumber Company, Malvern, Ark., which is a branch of the Moline Plow Company, Moline, Ill., is receiving its first shipments of hardwood timber from its holdings on the Malvern & Camden railroad. The company operates a large hardwood plant at Malvern, with a good supply of timber available. It expects to continue in very steady operation.

Miss Dorothy Frances Fritchey, daughter of A. G. Fritchey, who has been prominently identified with the hardwood trade of this city and section since coming south from Cleveland some years ago, will enter Vanderbilt University this fall. She has won the scholarship offered by the Memphis Intercollegiate association. There were a number of competitors for this scholarship and Miss Fritchey and her parents are receiving many congratulations over her success in winning this coveted honor.

C. J. Tully of the Anderson-Tully Company, has returned to Memphis after spending an extended vacation on the Great Lakes. He was accompanied by his wife.

Lumbermen here who own timberland holdings in Arkansas and who have to make frequent trips to that state are not particularly pleased with the attitude of the railroads entering Arkansas in making a charge of thirty-five cents for bridge tolls instead of twenty-five cents as heretofore. The railroads claim that they are justified in this course because of the action of the Arkansas railroad commission in forcing passenger rates to two cents per mile.

NASHVILLE

The Cherokee Lumber Company, with offices and plant in East Nashville, which recently amended its charter, changing the name of the corporation to the Farris Hardwood Lumber Company, and increased the amount of authorized capital stock from $40,000 to $75,000, will not have any change in the officers. W. M. Farris, Sr., president; L. H. Farris, vice-president; A. C. Farris, manager, and W. M. Farris, Jr., secretary, will continue in their respective positions. Need of increased working capital was the cause of the increase in stock. The company has no plans to enlarge plants at present.

The Memphis Siding & Lumber Company of Memphis, with authorized capital stock of $10,000, has been granted a charter. H. B. Weiziger, A. G. Riley, R. G. Brown, H. F. Fisher and H. J. Livingston, Jr., are the incorporators.

There may be prosecution of entrants to government land near Tuscaloosa, Ala., by reason of claims that they have been illegally cutting and selling timber. The government opened up 28,000 acres last year, and it is claimed that entrants have cut timber and sold the same to lumber

Bluestone Land & Lumber Company
MANUFACTURERS
WEST VIRGINIA HARDWOODS
Soft White Pine, Oak, Poplar, Chestnut, Hemlock
Band Sawed Stock
MILL FACILITIES COMPLETE PLANING
RIDGWAY PENNSYLVANIA

MEMPHIS

E. Sondheimer Co.
Wholesale Manufacturers and Exporters
RED GUM
SAP GUM
COTTONWOOD
CYPRESS
ASH
PLAIN OAK
QUARTERED OAK
HICKORY
SOFT ELM
SYCAMORE
All Grades and Thicknesses
We make a specialty of mixed cars of Sap and Red Gum, One-half to Two inches thick.

VANDEN BOOM-STIMSON LUMBER COMPANY
Manufacturers Southern Hardwoods
Red Gum a Specialty
Memphis Tennessee

TIMBER ESTIMATES
REPORTS INCLUDED
TOPOGRAPHICAL MAP, DETAIL ESTIMATES & WRITTEN REPORT
GARDNER & HOWE
ENGINEERS
Clarence W. Griffith Department Manager, Porter Building. Memphis, Tenn.

The Mossman Lumber Co., Inc.
Manufacturers
plain and quartered red and white oak, ash, gum and poplar.
ALSO FULLY EQUIPT DIMENSION PLANT
Memphis, Tenn.

firms. The law provides that timber shall be cleared from only such land as is to be cultivated unless the timber is used for construction of houses thereon

W. J. Sowers of the Major Sowers Saw Mill Company, Epley, Miss., was a visitor to Nashville, having been on an extensive tour for his company. Mr. Sowers predicts good business the coming fall, and believes that the bottom has been reached in prices.

Vicegerent Charles M. Morford of the middle district of Tennessee has issued a call for a concatenation of the order of Hoo-Hoo to be held in Nashville, Aug. 8. One of the largest gatherings of lumbermen in middle Tennessee for several years is expected. Vicegerent Morford is president of the Nashville Lumbermen's Club, and is a live wire in the local trade.

CINCINNATI
Hardwood Manufacturers and Jobbers

WE SELL "SERVICE"

in connection with a full line
OF
Oak, Gum, Poplar, and other Hardwoods

If you appreciate "service," in all its details, write, wire or phone

THE M. B. FARRIN LUMBER CO.

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HIGH GRADES IN SOUTHERN HARDWOODS A SPECIALTY

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MANUFACTURERS HARDWOOD AND PINE
FOURTH NATIONAL BANK BUILDING

Johns, Mowbray, Nelson Company
OAK, ASH, POPLAR & CHESTNUT
GUM AND COTTONWOOD

C. CRANE & CO.
MANUFACTURERS HARDWOOD LUMBER
1739 EASTERN AVENUE

DAY LUMBER & COAL CO.
Mfrs. YELLOW POPLAR and WHITE OAK
GENERAL OFFICE—CLAY CITY, KY.

RIEMEIER LUMBER CO.
OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

SHAWNEE LUMBER CO.
HARDWOODS, WHITE PINE and HEMLOCK
Sales Office—South Side Station—C. H. & D. R. R.

JAMES KENNEDY & CO., Ltd.
OAK, POPLAR AND OTHER HARDWOODS
FIRST NATIONAL BANK BUILDING

The Kosse, Shoe & Schleyer Co.
WALNUT, OAK, AND OTHER HARDWOODS
103-4-5 CAREW BUILDING

OHIO VENEER COMPANY
Manufacturers & Importers FOREIGN VENEERS
2624-34 COLERAIN AVENUE

Former Supreme Scrivenoter James H. Baird will co-operate with the vicegerent in making the arrangements.

A meeting was held in Nashville of citizens interested in a new trunk line railroad from the Ohio river by way of Nashville and Knoxville to Savannah. W. J. Oliver, who owns a small line out of Knoxville, is active in promoting the new line. The plan is to connect several small lines, including the Tennessee Central, and build the necessary links. It is claimed that the proposed route will be the shortest line from Chicago and St. Louis to the Panama Canal, and will be a great tonnage getter from the west.

BRISTOL

The R. E. Wood Lumber Company of Baltimore will shortly begin the operation of a band mill at Earhart's, seven miles south of Bristol, where the company has purchased a large area of hardwood timber and is now putting in a mill.

The Pittsburgh Lumber Company is now operating on a large scale at Hampton, Tenn., and is cutting 75,000 feet of stock daily. The company has a ten-year cut of virgin hardwood.

W. G. McCain of the Peter McCain Lumber Company has returned from a business trip in North Carolina. The company has a $50,000 tract of hardwood timber in Carter county, Tennessee, which it will begin cutting on as soon as it has exhausted its present supply in the Holston mountains east of Bristol, which will be within the next year.

The Rockcastle Lumber Company of Huntington, W. Va., formerly of Bristol, has purchased a large area of timberland in Marion county, Kentucky, and will cut it at the present band mill at Meek, Ky. The company will soon finish cutting a large area of hardwood timber adjacent to Meek, which it purchased about five years ago.

The Dione Lumber Company of this city has installed mills in western Kentucky and is now operating. Irving Whaley and H. M. Hoskins of the Whaley-Warren Lumber Company and the H. M. Hoskins Lumber Company, respectively, are interested in the new company.

LOUISVILLE

Fred McCracken of the Kentucky Veneer Works has yielded to the attractions of golfing and is now one of the regulars at the Audubon Country Club. He recently took part in the "Duffers' Tournament," arranged for those who are yet unable to converse fluently in golf, and made an excellent showing.

The Kentark Land & Timber Company, the local concern of which Robert Carnahan is president, has enlarged its scope considerably, purchasing 21,000 acres of oak, gum and ash timber in Arkansas from the Union Land & Lumber Company. The land is located in Jefferson, Lonoke and Arkansas counties, in the first of which the Kentark company already had large holdings. Active operations of the property will be carried on through the Varner Land & Lumber Company, which is building a sawmill at Geridge and which is already operating another near Stuttgart. Mr. Carnahan and the Kentark company are both interested in the Varner company, which has a contract to manufacture lumber for the latter corporation.

Walter Hogan of Milford, O., has purchased the Lewis tract of timber on Licking river, near Caney creek, and has contracted with Dick Russell of Hazel Green, Ky., to saw it into lumber. There is about 1,000,000 feet in the tract.

The Arlington, Ky., Lumber Company has moved its mill from Arlington to Park Place, Ark., and built a new mill at Arlington. It will also make other improvements, such as the installation of electric lights and water service throughout its plant.

ST. LOUIS

W. W. Dings, secretary of the Garetson-Greason Lumber Company, who went to Colorado with Mrs. Dings and the children several weeks ago, has returned. He left Mrs. Dings in Colorado and will return there later in the summer, to remain a while and bring her home.

The Lumbermen's Club of St. Louis will give another buffet luncheon to its members and visiting lumbermen on Aug. 12. The last one given, a few weeks ago, was so much enjoyed by the members and their friends that President Whitmarsh, Secretary Pier and the entertainment committee of the club decided on another before the regular season commenced. The club is one of the most active organizations in the city and most of the leading lumbermen, both wholesale and retail, are members. Visiting lumbermen are always welcome to the club rooms and few visiting lumbermen neglect to take advantage of the courtesy.

Frank Liebke of the C. F. Liebke Hardwood Mill & Lumber Company says the company is seasonably busy. It is hard at work sawing the several big shipments of ash logs that have come in recently and filling orders. It has orders on hand to keep the plant busy for the next six months, even if another order is not received. It is expecting another shipment of ash logs of about 700,000 feet to arrive within the next ten days.

C. G. Labbe is now traveling for the Thomas E. Powe Lumber Company, covering the territory east of Chicago. Although starting in at a very dull time of the year, Mr. Labbe is sending in some very good orders and feels greatly encouraged.

The Lothman Cypress Company is having a nice business in spite of the quietness of the season. E. W. Blumer, sales manager of the company,

states it is well satisfied with the volume of business being done and looks for a splendid fall trade within the next few weeks.

L. M. Borgess of the Steele & Hibbard Lumber Company is an optimist as to business. He states that while it may be a little quiet at present, the prospects are exceedingly bright for the fall. Not only will business be fine but prices will be considerably higher than at the present time, and so the company is not forcing sales by making concessions.

R. U. Fletcher, local manager of the Hooton Hardwood Lumber Company, is well pleased with the outlook. Mr. McRoberts, whose territory is the northern part of Illinois, has been out on the road and has been turning in quite a nice amount of business.

Receipts of lumber by rail at St. Louis during the month of July this year were 16,371 cars. During July last year the receipts of lumber were 16,023 cars, an increase last month over the corresponding month last year of 348 cars. Shipments last month were 12,655 cars, compared with 12,666 cars last July, a falling off of 11 cars. There were no receipts or shipments of lumber by river during July of last year or this.

ARKANSAS

The electrical and wind storm, which swept over various parts of Arkansas on Aug. 1, doing considerable damage to property, wrought two fatalities among the employes of the Cornan Cooperage Company of Des Arc. B. B. Davis, fifty-five years of age, and his son-in-law, N. West, while beneath the large shed of the company were struck by lightning and instantly killed. Bernice Davis, the seven-year old daughter of B. B. Davis, who was sitting in her father's lap at the time, was severely burned by the flash. Mr. Davis is survived by a wife and large family, while Mr West leaves his wife, a daughter of Mr. Davis.

The heading plant, owned by the Marianna Heading Company and located on West Tennessee street of Marianna, Ark., was partially destroyed by fire the latter part of July. The blaze was discovered early enough to be extinguished, however, and the loss was only slight.

The Mount Olive Stave Factory of Batesville, Ark., which has been closed down for some time undergoing repairs, has resumed operations and is now running on full time, giving employment to about 150 men.

The Clarendon Boat Oar Company of Clarendon, Ark., recently filed articles of incorporation with the secretary of state of Arkansas, and received a charter. This concern has extensive investments in Arkansas, though the majority of its stockholders are New York capitalists.

Cutting of hardwoods is very active in many parts of the state at present. At Hunter, Ark., are five sawmills which are running full time, sawing daily many thousand feet of hickory, gum and oak lumber. The shipments from these mills is also very great, being practically as fast as the lumber is sawed.

W. H. Overholt of Chicago recently purchased a tract containing 760 acres of hardwood timber, located near Brinkley, Ark. The tract is known as the B. L. Shoup tract, and is said to contain some very valuable timber. Mr. Overholt plans to place sawmills on the tract at once, and proceed to saw and market the timber. As fast as the timber is removed the land will be cleared and placed in cultivation.

MILWAUKEE

Charles F. Kade of Sheboygan, and business men of Plymouth are organizing a company which will operate a fixture and furniture factory in the plant formerly occupied by the Plymouth Veneer Company, at Plymouth. A capital stock of $35,000 is being subscribed for. It is planned to secure the necessary machinery immediately and have the plant in full operation within sixty days. The products at present will consist principally of store and office fixtures and show cases. M. H. Hand, E. A. Dow, Louis Fled and E. A. Stolper are also prominent in the movement. The name of the new concern will be the C. F. Kade Fixture and Show Case Company.

A company, which is to manufacture store, office, church and bar furniture and conduct a general woodworking plant, has been incorporated as the Alberts & Meyers Company, at Two Rivers. The capital stock of the new concern is $12,000. The directors and officers are Edward Alberts, president; Oscar B. Alberts, secretary and treasurer; H. Meyers, Arthur Wragg, all of Two Rivers, and W. C. Rahn of Chicago. Mr. Alberts will assume the business management and Mr. Meyers will superintend the manufacturing end of the plant.

The Heineman Lumber Company, Merrill, has added an up-to-date planing mill to its large sawmill. Although not occupying much room and requiring but two machines, the planing mill has a daily capacity of ten cars of lumber. Individual electric motors on the machines and a track system to expedite the handling of the lumber to and from the mill allow the efficiency and low cost of operation. With a season's supply of logs on hand the sawmill of the concern has resumed operation after a short summer-repair shut down.

Eugene Douville, sixty-nine years old, prominent in the lumber industry and until a few months ago actively interested in the Douville Lumber Company of Mobile, Ala., which he organized eleven years ago, died at his home in West Allis, July 23. Mr. Douville was a native of the Milwaukee suburb but was engaged in lumbering at Manistee, Mich., for thirty years, returning to Milwaukee twelve years ago. He is survived by his widow and two brothers.

Edward Roger of Emmet, a prominent retired lumberman and an old resident of Marathon county, died at the home of his daughter, Mrs.

Saline River Hardwood Co.

Main Sales Office

Pine Bluff, Arkansas

Manufacturers of

Genuine Forked-Leaf White Oak

Red and Sap Gum
Red Oak and Ash

¶ We offer to the trade a remarkably SUPERIOR lumber product.

¶ Our TIMBER is virgin forest growth of the highest type.

¶ Our MILLS are new and produce accurately manufactured stock.

¶ Our LUMBER is all KRAETZER-CURED—treated with steam under pressure directly from the saw—insuring quick drying to light weight, freedom from seasoning defects and stick-marking, splits and stain.

¶ Kraetzer-cured lumber will "stay where you put it."

¶ Dry kiln and oak flooring plant in connection.

¶ We solicit the inquiries and orders of critical and discriminating buyers.

¶ For straight cars of Yellow Pine, or mixed cars with Oak Flooring, write LONG-BELL LUMBER COMPANY, Kansas City, Mo.



¶ Fitzgibbons & Krebs Patent Elevated Traveling Derrick propels itself on 28-ft. gauge track.

¶ No guy wires.

¶ Write to O. M. Krebs, Mallory Branch, Memphis, Tenn., or to P. F. Fitzgibbons, Chattanooga, Tenn., for pamphlet fully illustrating and explaining the derrick.

Also ask for list of users.

Kentucky Lumber Company
MANUFACTURERS
POPLAR, PLAIN AND QUARTERED OAK, RED AND SAP GUM, ASH, CHESTNUT, BASSWOOD, HEMLOCK, WHITE PINE
Mills at
Burnside, Ky. Williamsburg, Ky.
Isola, Miss.
Sales Office
Cincinnati, O.

AT HALF PRICE
STEAM SKIDDER AND LOADER COMBINED
Clyde Modern Equipment. Used about sixty days. Operations discontinued. No further use for it
For Particulars Write
GOGEBIC LUMBER CO.
GRAND RAPIDS, MICH.

SAWYER GOODMAN CO.
MARINETTE, WIS.
Mixed Cars of Hardwood, Basswood, White Pine and Hemlock, Cedar Shingles and Posts
We make a specialty of White Pine Beveled Siding and White Pine Finish and Shop and Pattern Lumber

The Tegge Lumber Co.
High Grade
Northern and Southern
Hardwoods and Mahogany
Specialties
OAK, MAPLE, CYPRESS, POPLAR
Milwaukee, Wisconsin

Joseph McGuire, at Halder, aged eighty years. He was a native of Canada. Three daughters and a sister survive him.

Jerry G. Anderson, who was connected with the Wilson-Weber Lumber Company of Colfax since 1906, died at his home in that city recently at the age of fifty-four years. He is survived by his wife, nine children, his mother, two brothers and one sister.

The sawmill of the Iron River Lumber Company, at Iron River, was destroyed by lightning, causing a loss of $50,000, partly covered by insurance. The planing mill and lumber yards were saved and only 400,000 feet of lumber in close proximity to the mill was destroyed. The mill will not be rebuilt but the planing mill will be operated the balance of the season. The Hines Lumber Company has overhauled the Park Falls mill and will resume operations with men from Iron River.

The Northern Hardwood Lumber Company of Marshfield has filed a notice with the secretary of state dissolving as a corporation.

The American Hobby Horse Company has been incorporated by Hans Maison, James G. and G. W. Hammerschlag at Milwaukee. Capital, $6,000.

According to an estimate of the standing timber on the government lighthouse reservations on the Apostle islands in Wisconsin, the government inspectors in the Forestry Service report 5,000 acres. This amount is sufficient to manufacture all the pilings, spar buoys and other material used in lighthouse work on the Great Lakes.

Directors and officers of the Northern Casket Company at Fond du Lac were re-elected at the annual meeting held recently. William Mauthe was re-elected president and H. R. Potter, secretary and treasurer. The company reports a most successful year and bright prospects.

The historic fire tug, The Menominee River, which played an important part in all of the big lumber fires in the vicinity of Marinette and Menominee for over twenty-five years, has been sold to Capt. Thrall of Green Bay, who, by the way, built the vessel thirty-five years ago. The Menominee River was condemned by government inspectors early this season and will now be completely rebuilt and put into commission again next season. One of the most spectacular fires in which the tug rendered service was the big Sawyer-Goodman Company fire several years ago.

The end of the operation of the Menominee River Boom Company in the vicinity of Marinette, at one time the largest of its kind in the country, will come within the next year or two. This year the company has only 28,000,000 feet to sort and will undoubtedly have less next year. The year of 1915 may mark the conclusion of its business and according to plans already made it will be taken over by the Marinette and Menominee Paper Company. There is very little pine remaining to be cut on the Menominee or its tributaries and the hardwood is brought by rail. As soon as the driving and sorting work is over, the boom company will make arrangements for raising the deadheads that now lie on the bottom of the Menominee and its tributaries. It is estimated that there is 100,000,000 feet of timber, which will probably be raised and cut in a portable mill. For the past few years the company has been doing some of this work, raising from four to five million feet, which are stored on the banks until the following season and then floated to the mills.

"Col." Al. Raynor, aged eighty-three, living at Crooked Rapids, near Couderay, well known among the old-time lumbermen as keeper of a famous stopping place at Crooked Rapids, on the Chippewa river, for the past fifty years, has been married to Mrs. Craig, of Birchwood. They hold the record of being the oldest couple ever married in Sawyer county. During the early periods of lumbering in that district the "Colonel" entertained many of the old millionaire lumbermen while on their way from Chippewa Falls to the headwaters of the Chippewa river, as the nearest railroad point was Chippewa Falls, 100 miles south.

J. H. Weed, a prominent lumberman of this state, who built many sawmills in Oshkosh and the northern part of Wisconsin and Michigan, died at Appleton at the age of ninety-three. His home was in Oshkosh.

The Hardwood Market

CHICAGO

During the last week or two trade locally has showed an appreciable improvement, both in the number and volume of orders. This change has not, however, been startling in its character or unduly encouraging, but is generally accepted as an indication that previous predictions of the fall trade will be well borne out. Chicago lumbermen have for some time freely predicted that the fall months would see the opening of a highly satisfactory condition in the lumber business. The furniture exhibits in the Chicago market turned out to be more satisfactory than the opening week's business indicated. As a result of the sales effected at the exhibits, the local furniture houses are in a pretty active condition. While they are still hesitant about placing unduly large orders, they are in need of considerable stock and are buying a satisfactory amount of lumber in smaller lots. The generally firm condition as to prices continues, with concessions in some items. Members of the local trade buying in the North and South still report that there are no large stocks at any of the mills in either hardwood producing section. With the fall demand imminent, it is expected that this condition will, in the not very distant future,

effect a reversion to the former general level of prices. Conditions, generally speaking, both with the yard trade and the factory trade, are excellent, the yard men especially being in an optimistic mood.

NEW YORK

The local hardwood market shows little change in the past two weeks. It is generally believed, however, that the dull season is nearly at an end and that the early fall will see a material improvement in business generally. The money market is tight and loans are not easy to obtain, which has curtailed the operations of builders and cut down the consumption of lumber. Stocks at wholesale and mill points are easier, which has tended toward lower prices on some lines. Prices are generally satisfactory, however, and there are no signs of a real break. Some items of oak, poplar and gum are lower, as well as maple flooring. Oak flooring remains firm and in good call. Mahogany is still high in price, no great amount of stock being offered.

BUFFALO

The hardwood trade is generally called quiet this month. Something is doing right along at the different yards, but it is of a midsummer character. Not much stock is being received at present, and receipts up to the beginning of the present month have been fairly active. Buying is being restricted to present needs and many purchasers are running their offices on a vacation basis.

The chief wood in demand is plain oak as for some time. Brown ash, maple and birch are among others in fair sale. Poplar is about holding its own. Thus far there has been no dropping off in yard prices and dealers state that they are getting as good figures today as they did several months ago, when business was much more active. While buyers look for lower prices, there is some prediction that they will be disappointed.

PHILADELPHIA

There was a noticeable diminution in hardwood trading during the month of July, but the last ten days have shown a marked improvement in the situation. Although sales have not increased to any extent, more inquiries are coming in and an unfailing optimism prevails as to outlook. Reports are floating of a weakening of prices in poplar, ash and even in plain oak, but this is true, it is ascertained, only in spasmodic cases and in many instances is traceable to commission men. The buyer still preserves a conservative attitude, as he firmly believes in a possible break in values in the near future, but the trade generally is confident that the advent of fall will bring firm prices all along the line, with an upward tendency at the first rush of orders. Collections are said to be slow, and the curtailment of loans for building operations, etc., no doubt has an influence on the lumber situation at this time, but taking the hardwood situation as a whole there is a decided improvement both in prices compared with same period of last year and in volume of trade.

The relative positions of the hardwoods are unchanged. Oak of all kinds, with but slight variation according to grade, holds first place; ash, maple, chestnut and basswood retain their old position; birch, beech, and in fact all hardwoods, are holding their own.

BOSTON

The general market is in a much brighter condition than for some time, and the fall should bring forth a good business. The soft wood manufacturers are recovering from the so-called low market, with prices firmer and more uniform. Hardwood wholesalers, while business is not very lively, do not appear to be worrying over what is usually considered the vacation season. Although no especially noticeable large orders have been reported, there is more or less doing all the time, and it is the hope of all lumbermen that confidence in the business of our country and our statesmen will be maintained. The yards are complaining some over the poor payments, builders finding much difficulty in floating their loans, being attributed as one of the causes for slow payments.

BALTIMORE

The general easing off in the quotations on lumber has also affected most of the hardwoods, in which a slightly lower tone is being noted, though in various instances no actual decline is evident. It is the experience of sellers that buyers show more hesitancy about placing orders, and the resultant disposition to aid the movement to some extent encourages offers of concessions; but any statement regarding the state of the market depends much upon whether the millman's end or that of the buyer is taken. The millman as a rule adheres with considerable firmness to his quotations, and whatever easing off has taken place is largely confined to the distributive markets. The wholesaler is confronted by the necessity of having to pay comparatively high prices, and to contend with more or less competition when it comes to placing stocks. The yards and consumers, encouraged by the free offerings at the present time, are slow to place orders and endeavor to try out the market by holding off and getting quotations from a number of sellers, using the figures of one to bear those of another. In this way some degree of unsettlement is brought about. It cannot be doubted that the mills have caught up with the requirements of the market in a majority of directions and that there is now no prospect of a scarcity of one kind of lumber or another.

RED GUM

A few words to the users of this excellent wood and those who contemplate using it.

Many years' experience in the manufacture and marketing of this item of stock have satisfied us that in this wood, more than in any other hardwood, the successful consuming manufacturers insist upon having only **high quality** stock —not only as to grade, but manufacture and careful handling while in pile for seasoning.

Choice logs do not always produce good lumber—it depends largely upon how much care is exercised in the process of manufacture; nor does the production of high quality stock end here—it must be carefully put into piles and sufficient piling sticks used to insure its drying out flat.

When you are about to place an order for Gum, some of the essentials that suggest themselves to you are:

Full and uniform thickness.

Very dry stock that in process of drying has remained flat and straight.

Good range of widths and lengths to assure you of a good yield of clear cuttings of various sizes you require.

Last, but not least, after placing orders you want them executed promptly and on time—also honest grading and measurement.

We are equipped with six band mills, backed by our own timber lands, to give you that kind of stock and unexcelled service.

Write, Phone or Wire for Prices

PAEPCKE LEICHT LUMBER COMPANY
GENERAL OFFICES CHICAGO, ILLINOIS

Kraetzer-cured LUMBER

TRADE MARK REGISTERED IN U. S. PATENT OFFICE

¶ Kraetzer-Cured lumber is susceptible of being thoroughly air dried or kiln dried in less than one-half the time ordinarily required for seasoning unsteamed wood.

¶ Kraetzer-Cured lumber does not case-harden, check, end-split or stain, and dries without warping or buckling.

¶ Kraetzer-Cured lumber has a uniform tone of color. Its working qualities are greatly improved, and the beauty of the flake on quarter-sawed stock is enhanced.

¶ Kraetzer-Cured lumber dries out to materially less weight than unsteamed wood, ranging from 200 to 500 pounds per thousand feet.

¶ Kraetzer-Cured lumber will neither shrink nor swell, and the grain will not raise when water stains are employed in finishing.

¶ Kraetzer-Cured lumber is not impaired in strength or quality by the process.

¶ Kraetzer-Cured lumber eliminates all glue-joint troubles and "will stay where it is put."

¶ A list of manufacturers of Kraetzer-Cured lumber will be supplied on application.

Kraetzer-Cured Lumber is produced by the use of the Kraetzer Preparator, manufactured by

The Kraetzer Company
537 S. Dearborn St., CHICAGO

TRADE MARK REGISTERED IN U. S. PATENT OFFICE

Kraetzer-cured LUMBER

Basswood and gum are among the stocks in least plentiful supply because of interference with production by the extensive spring floods. The quotations on these woods, therefore, have kept up almost better than any others. Concerning chestnut, on the other hand, reports vary. Some hardwood men assert that the quotations have receded, while others are just as positive that they are holding up on sound wormy. Stocks of chestnut increase very rapidly when once production gets well under way, and it can hardly be doubted that an easier feeling prevails. Oak is also being offered with considerable freedom and the quotations on No. 1 common are easy, with the best grades practically unchanged. Ash and other woods are about the same, the trade in them being of less volume naturally. The lower grades of poplar are showing no advance and the continuance of liberal offerings does not encourage expectations that a positive rise will take place in the near future. The export situation is still decidedly unsatisfactory, with stocks abroad very large and prices low. At the prevailing figures the exporters are unable to do a profitable business, and a rigid holding back is still in order. Oak planks, especially, are unsettled and the foreign buyers are inclined to make extensive rejections, which renders the net returns uncertain, even when planks are forwarded on contract.

COLUMBUS

Trade in hardwoods in central Ohio has been fairly active during the past fortnight. There is a fair demand for all grades and varieties from both factories and retailers, and buying is evenly divided between the two branches of the trade. Prices are fairly well maintained and shading of quotations is reported only in isolated cases. One of the best features of the market is the active building operations which are reported in the cities and towns of the Buckeye state. This means a good consumption of all kinds of lumber and is producing quite a demand for certain hardwoods such as oak, poplar and chestnut.

Dry stocks in the hands of mills are not large and this fact is taken as an indication that no great weakness in quotations will come to pass. Dealers' stocks are not large and their policy is still to buy only what is needed for immediate wants. The same policy is followed by factories. As a result buying is steady and is up to the usual volume for the time of the year. Factory stocks are not large. Plants engaged in making vehicles and farming tools are good buyers. Some activity is shown also by furniture concerns.

Quartered and plain oak are probably the strongest points in the market and the demand for both is good. Prices are strong. Chestnut is also moving in good volume at steady quotations. Poplar is becoming stronger, especially the lower grades. Basswood and ash are selling well. Other hardwoods are unchanged.

CINCINNATI

With few exceptions, the building trades industry is at a standstill, owing to the local teamsters' strike, and it is estimated that those interested in this line of business alone are paying interest upon $3,000,000 of borrowed capital that is tied up on account of the strike in buildings that are not progressing. Those anticipating trouble and who laid in supplies of millwork and rough lumber are now about forced to stop and lay off the mechanics. It is claimed that at this time more than 8,000 skilled mechanics in building trades alone are idle on account of there being no supplies. Millwork is one of the scarcest items, and with all planing mills shut down for more than a week and the prospects of at least another week of the trouble, there will be quite a knockout in building circles. This, coming at a time when business in the retail lumber line and millwork dealers, after having a very late start, were just getting some real business for the first time this year, is very discouraging, but all parties concerned are determined to take their losses now and stop the antagonism to business interests rather than have a constant interference from first one branch of union labor and then another.

There is a decidedly dull tone to market conditions and prices are being held steady by the larger millmen and wholesalers, who refuse to part with good stocks at anything but satisfactory prices, preferring to let the small mills, who persist in selling at a little off market prices in order to move stock, continue until they are closed out. Shipments to consumers continue good on old orders, but new business in quantities is lacking. Much business in a small way is being done, indicating once more the hand-to-mouth policy of buyers, who are buying only for immediate needs.

The poplar trade is quiet, scarcely any improvement is noticed. Low grades are in good demand, but No. 1 common and better are only moving in spots and at unsatisfactory prices. Millmen are standing pat on price, as a rule, and will not let go of choice stocks except at reasonable prices. Some improvement, however, is noticed in demand for wide stock, but the general demand is far from satisfactory.

TOLEDO

The hardwood market continues quite firm despite the weakness noticeable in yellow pine. This is due largely to the fact that hardwoods in wanted qualities and sizes are scarce and have been for some time. Good dry stocks are extremely hard to get and local yards are low in assortments and stocks generally. Plain oak continues a leader in this market.

the quartered stock being a trifle slow. Red oak has developed a little weakness. Ash, hickory, basswood and gum are selling well and prices are holding firm. The demand is from general sources, furniture and vehicle factories being large users. The building trade is providing a good market for interior finish and flooring, and the railroads and car concerns are liberal buyers. Building continues very heavy in Toledo and plans are now being laid for a new retail center which means the reconstruction of many business blocks in the heart of the downtown district, as well as the erection of many new buildings of importance, all of which will prove good users of hardwood lumber.

INDIANAPOLIS

The hardwood market continues to show improvement. Wholesalers report a good volume of business and many inquiries for shipment in the near future. Big crops, the fact that industrial conditions generally are good over the state and that the money market is a trifle easier are given as some of the reasons for improved conditions.

An advance in hardwood prices soon is being predicted.

MEMPHIS

The weather has continued practically ideal for logging operations throughout this section during the past fortnight and rapid progress has been made. There was a wide distribution of rainfall throughout the Memphis territory during July, but this did not interfere at all with work in the woods, and the supply of logs is regarded as quite full. In fact, there is a more abundant stock of timber ready for the mills of this city and section than is usually the case at this time of the year. It is therefore expected that present rather full sawmill operations will be continued without interruption, especially as the demand for lumber is broadening somewhat.

There has been comparatively little actual increase in the number of orders booked by local manufacturers and wholesalers, but there is a decided gain in the number of inquiries, with the result that the note of optimism is much higher than it has been during the past four or five weeks. The furniture manufacturers are showing increasing interest in the market and are making inquiries which suggest rather large needs on their part. It is believed that there will be a good business developing in the near future from this source. There is likewise more inquiry for car material of all kinds, due to the efforts of the railroads to so replenish their rolling stock and general equipment that they will be able to take care of the large volume of traffic promised by virtue of the indicated heavy agricultural yields, with particular reference to cotton. There is likewise an increasing call from builders of buggies, wagons, carriages, automobiles and other vehicles and there is also a rather increased inquiry from other lines, with the result that the outlook is for a good business in southern hardwoods to develop within the next thirty days. Tariff agitation has not had the depressing effect on general business expected in some quarters, and lumber interests here are inclined to take heart from the fact that the steel and iron industry, generally accepted as a correct barometer of trade conditions, is in much better shape than a short time ago. Due emphasis is also attached to the large prosperity indicated for the entire South as a result of the prospective big cotton yield. This is regarded as furnishing a true basis for fundamentally sound conditions, and those who are engaged in the hardwood trade as well as in other allied or collateral industries, feel sure that the outlook is particularly good. The big cotton crop means large money returns for this territory and a relief of the financial stringency which has been strongly in evidence for some time. It also means a largely increased purchasing power for the people of the cotton growing area and, with this prospect in view, manufacturers of almost every commodity made from southern hardwoods are anticipating large consumption of their output. This, it is felt, cannot help but exert a favoring influence upon the manufacturers of southern hardwoods and upon those who are engaged in the distribution of the output of southern hardwood manufacturing plants.

NASHVILLE

Business has continued quiet in the Nashville market the first part of August, though it is about up to the seasonable volume. The fact that local firms had a good many orders ahead at the opening of the summer season has helped them a great deal, and July business was probably about the same as last year. There is an optimistic view with regard to fall trade. Prices are about firm, though concessions could probably be had on attractive business. Oak continues to be a satisfactory seller. Poplar and chestnut are in fair demand. Ash, hickory and walnut are good sellers.

LOUISVILLE

The crop situation is puzzling local hardwood men more than anything else, as it is believed that this factor will influence trade conditions during the fall more than any other one thing. It is figured that with good crops business can stand off even such unfavorable influences as the new tariff and currency revision; but if the crops happen to be below the average, things will not be so satisfactory. The severe drouth which the corn belt is now experiencing does not look favorable, and it will take some good rains to restore conditions to anything like normal. The Ohio valley is suffering from lack of moisture, and the farmers' woes are being

Mahogany Lumber and Veneers

In buying Mahogany Lumber and Veneers of C. L. Willey, the purchaser is assured of a product cut from the finest figured wood that money and a search of the world's markets can secure.

Beyond this he is assured of prompt and painstaking service, and a quality of product not usually obtainable.

Right now stored in the log yard of the Willey plant at Chicago is more than a quarter million dollars' worth of the highest class figured mahogany ever imported to this country.

The accompanying illustration shows a corner of the assemblage of these mahogany logs.



The Willey warehouses are well stocked with a superb collection of Mahogany, Vermillion, Walnut and other fancy veneers.

An inspection is cordially invited. Take Blue Island Ave. car at the postoffice to Robey Street.

C. L. WILLEY, Chicago

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transmitted to the lumbermen via the retail dealers and the manufacturers of hardwood products. However, it is hoped that conditions will right themselves, as they usually do, in time to prevent anything like a crop failure. Demand for lumber has shown improvement with the opening of the month, the furniture factories being among the most consistent buyers at present. Quartered oak, white almost exclusively, of course, plain oak, both red and white, and ash are among the leading sellers at present ash having improved considerably of late. Poplar is a bit quiet, though the lower grades are selling, and red gum is about in the same condition. Chestnut is also inactive at present.

BRISTOL

The Bristol lumbermen report business moving along well, considering the season of the year. While not many new orders are coming in, there is plenty already booked to keep the mills busy for some time to come. The export trade is encouraging and is considerably larger in volume. This section has been having one of the worst droughts in years, and the loss will be very large. The corn crop is almost a total failure, as a result of the prolonged dry spell.

ST. LOUIS

While the hardwood trade is comparatively quiet, as it usually is at this period of the year, a fairly good business is being done and the demand for nearly every item on the list is satisfactory. The quietness now prevailing is not unexpected by the local distributers, for they laid their plans to take their vacations and many of them are away during the lull. Meanwhile those who are at home are busy getting in their stocks for the fall as an unusually brisk demand is anticipated within the next few weeks. Oak is the item mostly called for and ash and cottonwood are also in fair request. Prices on nearly all items are holding their own, very few concessions although some are reported being made. When made they are done so by distributors who have surplus stocks on hand which they want moved in order to turn them into cash. Those who can are holding off for fall, as the majority of the distributors realize that when the orders start to come in, prices will not only remain firm, but they will increase, especially those items most in demand and short in supply.

ARKANSAS

The retailers of Arkansas seem to have the opinion that the rock bottom in prices has been reached. Buying during the past week has been exceptionally strong, and much lumber was disposed of by the mills before the upward change in the market came. The advance has been made by many of the larger mills, however, and the indications are that prices will not again go down to where they were a few days ago. Inquiries from all lines of the lumber trade are more numerous of late than they have been for the past several months.

The general crop outlook in Arkansas is very good. Cotton is in excellent shape, and corn is about made. Hay crops appear to be large, and the oat and wheat crops are good and of high quality. Good crops mean good lumber business, and the lumbermen of the state are more optimistic at this time than they have been in months. A material increase in the demand is expected in a short time. A number of the line yard concerns are now placing orders for fall shipment, and this is taken as an indication that, in the opinion of the larger buyers, the lowest mark in the market has been reached.

Some of the mills have been experiencing some trouble in getting all the cars needed. In fact, some say that they have not been able to get more than seventy-five per cent of the number ordered for several days. The indications are, judging from the condition of cars that are being furnished, that the car shortage is going to be a problem when the cotton and other crops begin to move.

MILWAUKEE

There seems to be a temporary lull in the local hardwood business, due probably to the fact that most consumers of hardwood stocked up fairly well in this line earlier in the season and are now waiting for the fall season. The fall revival is expected somewhat earlier this year, probably soon after Aug. 15, so the present dullness in trade is not regarded as serious.

Prices are being well maintained in fact, are higher than at this time a year ago. Wholesalers are confident that no concessions are to be expected and that a higher level will be reached later in the season. Available stocks of birch, maple and basswood are far from being large, despite the new stock which has been arriving. Reports from the mills say that stocks are showing a slight increase and that the supply will be larger by the time the fall revival is under way. Wholesalers are not inclined to make any price concessions in the effort to secure new business and the market is holding strong.

Buyers are evidently coming to the conclusion that there is nothing to be gained by putting off purchases, in view of the strong market and the shortage of stocks, and inquiries are beginning to arrive from various sources regarding shipments for the fall trade. Birch and maple are especially strong, although both plain and quartered oak are in about the same position. Basswood is in fairly good demand.

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First-class farm wagon manufacturing concern wants experienced, competent inspector for wagon gearing stock—Poles, Axles, Reaches, Bolsters, Eveners, etc. Steady position and good treatment for right man. Must work at home or on road as required. Only man experienced in this line need apply. State fully experience, age, salary expected, etc. Address

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WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

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WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
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LUMBER WANTED

Quote delivered Philadelphia, Pa., on
2 cars 8/4 sound wormy & 2 Com. Chestnut.
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Shipper to invoice direct. Name prices on any stock you desire to move.

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Various sizes for chair and table factories.

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This three-throw tally ticket cover is made from aluminum, and accommodates four tally tickets—4¼x8¼ inches in size.

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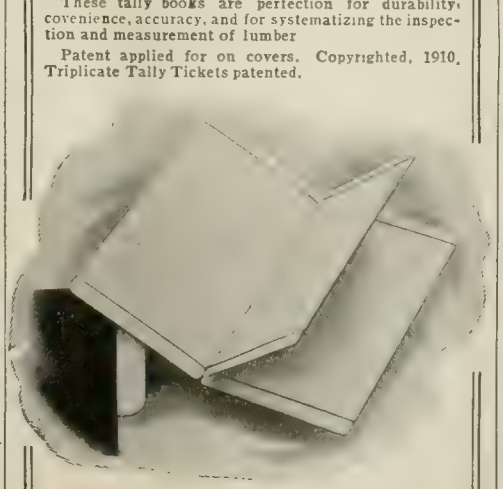
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Hardwood Record
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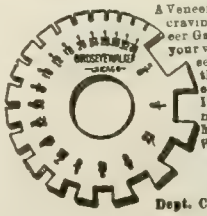
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WESTERN SOFT PINE
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A Veneer Gauge is the answer to a Veneer User's craving for years. This "Walker Brand" Veneer Gauge is a steel gauge that will satisfy your wants for all time. You can't do yourself a better turn than to buy one of these gauges. It gauges ACCURATELY every thickness from 1-40 inch to ⅝ inch INCLUSIVE Wake up to this opportunity. Price only $1.98 delivered by U. S. Mail. Order now, today. Address—6456 Woodlawn Ave. Phone Hyde Park 33.

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American Forest Trees

By Henry H. Gibson Edited by Hu Maxwell

"AMERICAN FOREST TREES" is a comprehensive work of more than seven hundred pages, illustrated by more than one hundred full page pictures of forest types of tree growth, and hundreds of minor pictures.

It answers every question worth asking about the infinite variety of forest growth in this country, and the utilization of these woods in lumber and other forms. The opinion of an expert on this work is:

"AMERICAN FOREST TREES" is the foremost contribution that has ever been made to American forest and lumber literature.

The price of this work is Six Dollars ($6.00) net. It will be sent on receipt of price, prepaid, subject to return and refund of payment if it does not prove satisfactory.

The very complete character of this work may be judged by the index following:

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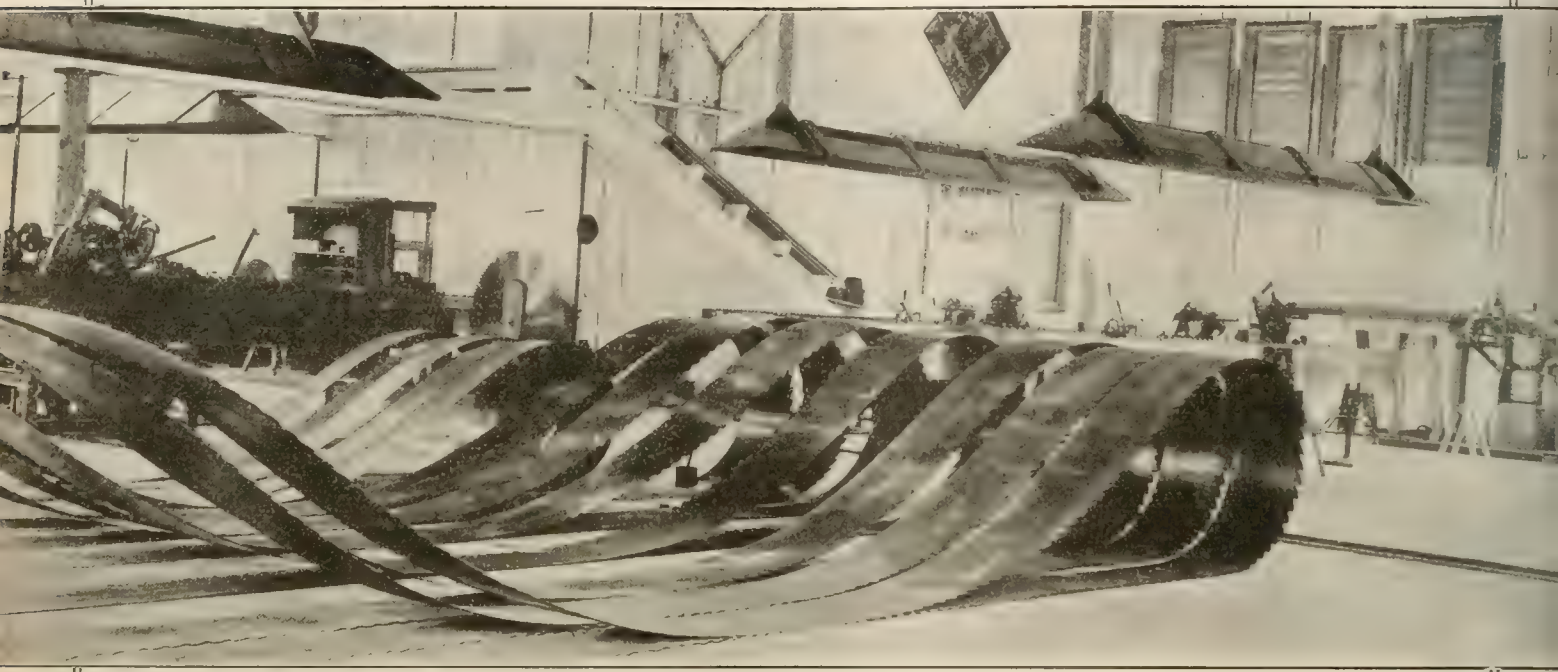
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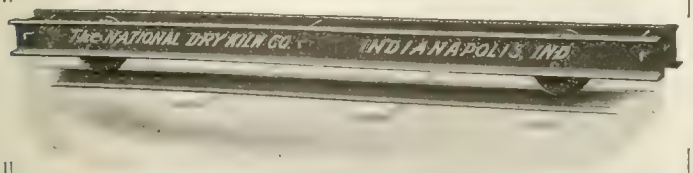
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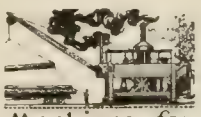
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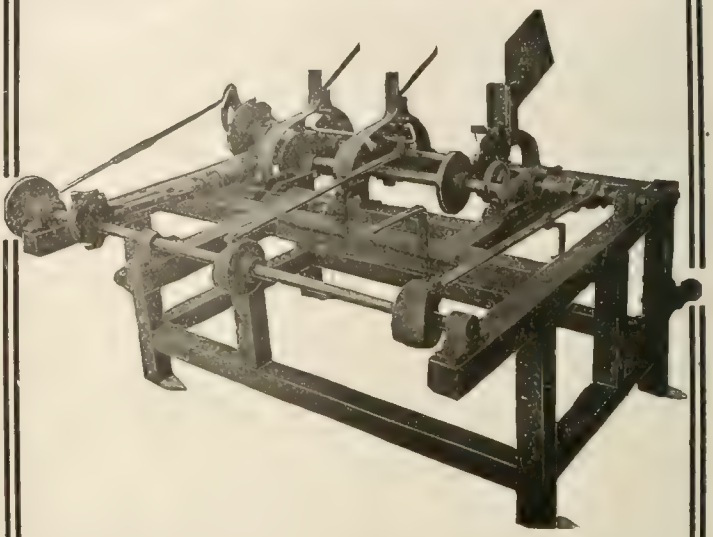
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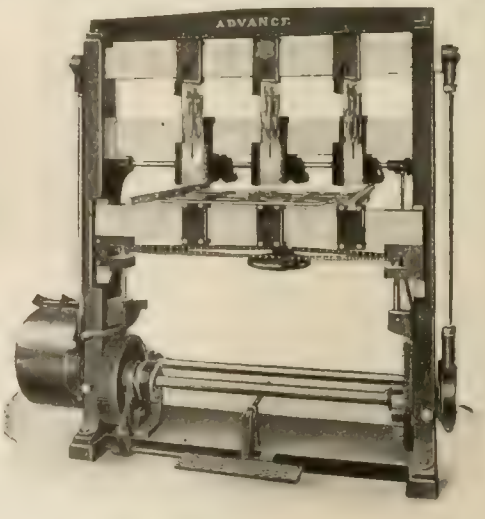
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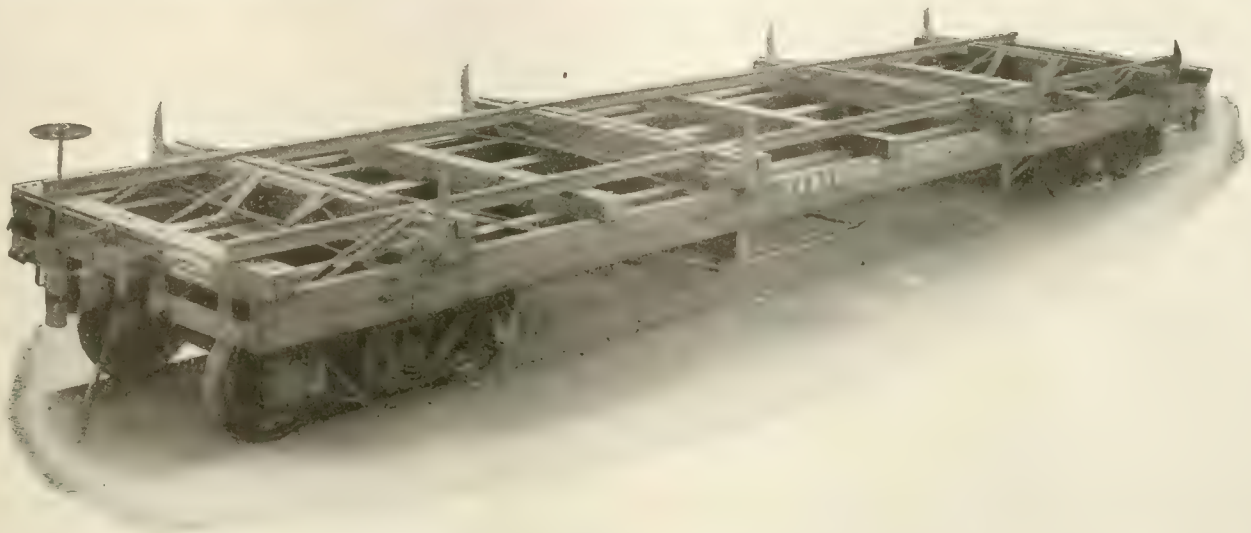
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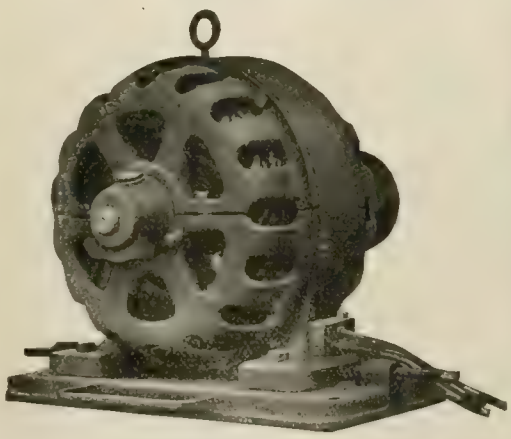


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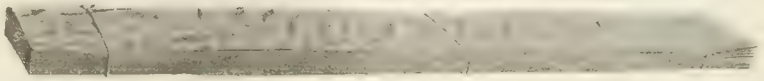
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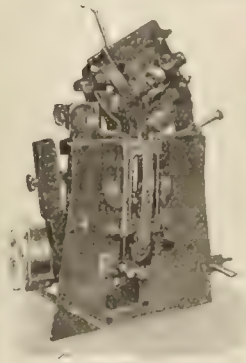
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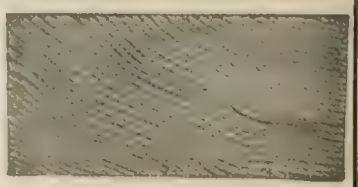


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30,000′ 4/4 End Dried Winter Cut White Maple
40,000′ 4/4 High Grade No. 1 Common and Better Birch
40,000′ 5/4 High Grade No. 1 Common and Better Birch
100,000′ 4/4 1sts and 2nds Soft Elm
150,000′ 1x4″ Pine Crating Strips S2S
50,000′ 1x4 & Wdr. Pine Crating (85% 6″ & Wider)

WE WOULD APPRECIATE YOUR INQUIRIES

Ludington Michigan

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

BASSWOOD

We Offer for Prompt Shipment

1 x 4 Clear Strips	150 M
1 x 6 1's and 2's	200 M
1 x 7 and 8" 1's and 2's	34 M
1 x 3 No. 1 Common	25 M
1 x 4 No. 1 Common	50 M
1 x 5 No. 1 Common	32 M
1 x6 No. 1 Common	148 M
1 x7 and up No. 1 Common	26 M
4/4 No. 1 Common	65 M

August 7, 1913

COBBS & MITCHELL, Inc.

Sales Department

CADILLAC MICH.

Mitchell Brothers Co.

Dry Stock List

MICHIGAN HARDWOODS

Cadillac, Mich. August 7, 1913

1x7 & 8 Basswood, 1s & 2s	30 M
1x4 Basswood, Clear	13 M
1x4 Basswood, No. 1 Common	11 M
1x6 Basswood, No. 1 Common (part dry)	19 M
4/4 Birch, 1s & 2s (part dry)	17 M
4/4 Birch, No. 3 Common (part dry)	33 M
4/4 Cadillac Gray Elm 1s & 2s	96 M
4/4 Cadillac Gray Elm, No. 1 Common	100 M
4/4 Cadillac Gray Elm, No. 2 Common	81 M
4/4 Cadillac Gray Elm, No. 3 Common	28 M
4/4 Rock Elm, No. 2 Common & Better	7 M
4/4 Soft Maple No. 2 Com. & Bet. (part dry)	18 M
4/4 Soft Maple, No. 3 Com	4 M
4/4 White Maple, end dried (clear)	14 M
4/4 Birdseye Maple 1s & 2s, end dried	1 M

CADILLAC QUALITY

When you want lumber of Cadillac Quality, Lumber which has been manufactured and seasoned properly, and grades which have not been blended to meet price competition—send us your inquiries.

WE SELL ONLY MITCHELL'S MAKE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

30,000 ft. 6/4 No. 1 C. & B. Basswood
50,000 ft. 5/4 1st & 2nds Basswood.
75,000 ft. 5/4 No. 2 C. & B. Birch
20,000 ft. 6/4 No. 2 C. & B. Birch
100,000 ft. 6/4 No. 2 C. & B. Beech
40,000 ft. 8/4 No. 2 C. & B. Beech

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



Ready for Shipment

Ten cars
4/4 No. 1 Common & Better Birch

Five cars
6/4 No. 1 Common & Better Birch

Two cars
8/4 No. 1 Common & Better Birch

Two cars
4/4 No. 2 Common & Better Ash

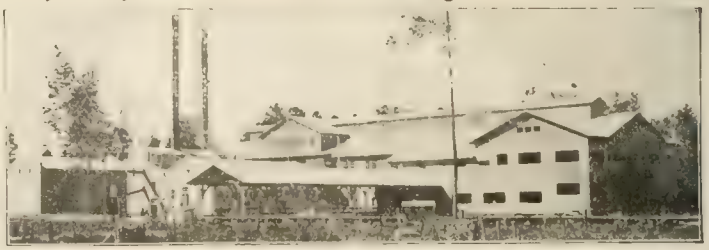
Three cars
4/4 No. 1 Common & Better Soft Elm

Five cars
4/4 No. 2 Com. & Better Basswood

Above cut from virgin timber. Grade and manufacture are first class.

Mears - Slayton Lumber Co.
1237 Belmont Ave. Chicago, Ill.

15,000,000 Feet Always On Hand



Our Double Band Mill
Huttig, Ark.

With two mills like this we manufacture 40,000,000 feet of band sawn southern hardwoods annually. We guarantee our lumber to be of excellent widths, full thickness, and to contain 50% to 75% of 14′ and 16′ lengths. We make high grades and all of the "CREAM" is in each grade. Send us your inquiries.

"Wislumbco Standards"

25,000	"	8 4 Log Run Hickory
30,000	"	4 4 x 13" & Wider 1st & 2nd Tupelo
40,000	"	4/4 No. 1 Common Red Gum
50,000	ft.	4 4 1st & 2nd Red Gum
50,000	"	4 4 x 13 to 17" Box Board Sap Gum
50,000	"	4 4 x 13" & Wider 1st & 2nd Sap Gum
50,000	"	6 4 Log Run Soft Maple
60,000	"	4 4 No. 1 Common Cypress
60,000	"	4 4 No. 2 Common Sap Gum
65,000	"	4 4 x 6 to 12" 1st & 2nd Tupelo
75,000	"	4 4 x 13 to 17" Box Board Tupelo
75,000	"	4 4 x 6 to 12" 1st & 2nd Sap Gum
75,000	"	4/4 No. 1 Common Sap Gum
75,000	"	4 4 Shop Cypress
100,000	Pcs.	1¼x1¼ 19" Oak Squares

A good stock of Oak, Gum, Cypress, Cottonwood, Elm and Maple

Wisconsin Lumber Co.
CHICAGO

MILLS
Huttig, Ark.
Deering, Mo.

SAVE YOUR MONEY BY USING THE

RED BOOK Published Semi-annually in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the **United States, Alberta, Manitoba and Saskatchewan.** The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St. CHICAGO — Mention This Paper. — 116 Nassau Street NEW YORK CITY

Hayden & Westcott Lumber Co.
SPECIAL RAILROAD DEPT.
Hardwoods :: Softwoods
823 Railway Exchange Building, Chicago, Ill.

For items of Hardwood Stock or Hardwood Machinery, you will find it advantageous to write our advertisers. Get in touch!

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

J. RAYNER
VENEERED PANELS
ALL WOODS
SEND FOR STOCK LIST
MAHOGANY LUMBER
CARROLL AVE. AND SHELDON ST.
CHICAGO

$100,000.00 to Invest

If you had $100,000.00 given you to invest on condition that the investment be *absolutely safe* and pay a fair rate of interest and an assured large final profit—what would you buy?

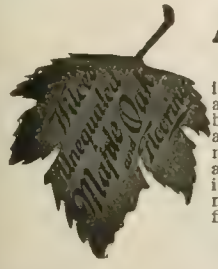
Timber land values have never declined. Panics and politics have no effect on timber. It is always growing without cultivation.

We own desirable tracts, both large and small, in the North, South and West. Write us for prices and details.

John C. Spry
Timber Lands Exclusively
1003 Harris Trust Building, CHICAGO, ILLINOIS

"WE ARE GETTING RESULTS"
WRITES ONE ADVERTISER
This Means That He Is Getting
NEW BUSINESS
Through His Ad
If we can do it for him is there any logical reason why we can't for you?
MAKE US PROVE IT
HARDWOOD RECORD, CHICAGO

Estabrook-Skeele Lumber Co.
MANUFACTURERS AND DEALERS IN
Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods
In the Market for Round Lots of Hardwood
WRITE US BEFORE SELLING
Fisher Building, . . . CHICAGO
'PHONE HARRISON 1984



A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free

The T. Wilce Company
22nd and Throop Sts. CHICAGO, ILL.

Hardwood Record's

strongest circulation is in the region where things are made of wood—WISCONSIN, MICHIGAN, ILLINOIS, INDIANA, OHIO, PENNSYLVANIA, NEW YORK and the East. **It's the BEST sales medium for hardwood lumber.**

For Veneer and Panel Manufacturers

Your Consumers' Lists Cost You BIG MONEY

We can save it all and relieve you of all the detail and effort necessary to tabulate consumers' wants. **Our Card Index System of those wants,** just out, is the result of systematic effort. It is endorsed by your competitor.

Can You Afford to Give Him that Advantage?

HARDWOOD RECORD **CHICAGO**

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO.

KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK

OUR SPECIALTY

MANUFACTURERS OF

QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER

BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER, Pres. — J. M. LOGAN, Gen'l Manager

C. C. CANNON, Vice-Pres. — C. R. SWANN, Sec'y and Treas

J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS

HARDWOODS AND PINE

POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:
Bank and McLean Ave., Cincinnati — I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:
WHITE OAK—Plain or Quartered.
RED OAK—Plain or Quartered.
CHESTNUT — BASSWOOD
POPLAR — WHITE PINE

Always carry large well assorted stock of all kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR, OAK, CHESTNUT, WHITE AND YELLOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

Kimball & Kopcke

Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

"THE VERY BEST"

ASH, BUCKEYE,
RED BIRCH, CHESTNUT, GUM,
RED OAK, WHITE OAK, PINE,
POPLAR and WALNUT

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

CINCINNATI
THE GATEWAY OF THE SOUTH

Lest You Forget
and
You probably don't know that we are now
Manufacturing in White and Red Plain and Quarter-Sawed OAK
3/8, 1/2, 5/8, 3/4, 4/4, 5/4 — 100,000 Feet per Day
EXPORT AND DOMESTIC

BENNETT & WITTE
MEMPHIS, TENN.
NEW ORLEANS, LA. CINCINNATI, O.
CABLE ADDRESS, ALL OFFICES, "BENNETT"

Do You Use Poplar?

If you do, you want stock that is soft in texture and easily worked. WE HAVE IT.
Let our representative tell you about our stock or send us your inquiries and let us QUOTE YOU.

The Mowbray & Robinson Co., Cincinnati Ohio
MANUFACTURERS OF
PLAIN AND QUARTER-SAWN OAK AND POPLAR

MILLS
Quicksand, Ky.
Viper, Ky.
West Irvine, Ky.

MAIN OFFICE
CINCINNATI, OHIO

YARDS
Cincinnati, O.
Detroit, Mich.
Rochester, N. Y.
Brooklyn, N. Y.

W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Grade West Virginia and Southern Hardwoods in stock at all times.

Shipments made direct from our own yards and mills in straight or mixed cars.

SEND US YOUR INQUIRIES

The Maley, Thompson & Moffett Co.

Veneers, Mahogany and Hardwood Lumber

Largest Stocks Best Selections

CINCINNATI, OHIO

L. W. RADINA & CO.

DEALERS IN

POPLAR AND HARDWOODS

CINCINNATI : : OHIO

If you want to reach the wholesale consumers of hardwood lumber throughout the United States, a HARDWOOD RECORD advertisement will do it for you.

If you want to reach the hardwood manufacturers of the United States, a HARDWOOD RECORD advertisement will do it for you.

The HARDWOOD RECORD represents high-class, special, class circulation, with a minimum of waste circulation.

Ask any HARDWOOD RECORD advertiser for experience on results.

GOOD GRADES

"STEARNS QUALITY LUDINGTON"

PROMPT SERVICE

HARDWOOD SPECIALISTS

LAST CALL
for Winter Sawn End Dried White Maple

Only a limited amount of this stock on hand, so cover your present and future requirements before the supply is exhausted.

Lower Peninsula
Hard Rock Maple



END DRYING LUMBER SCIENTIFICALLY

Stock on Hand

65 M 4/4 FAS.
36 M 5/4 FAS.
48 M 6/4 FAS.
55 M 8/4 FAS.
83 M 4/4 No. 1 Com.
26 M 5/4 No. 1 Com.
32 M 6/4 No. 1 Com.
35 M 8/4 No. 1 Com.

The STEARNS SALT & LUMBER CO. LUDINGTON, MICH.

LAMB-FISH LUMBER CO.

MEMBER HARDWOOD MANUFACTURERS ASSOCIATION OF THE U.S. — A Guarantee of a Square Deal in both Grade and Measurement

Band Mill and General Offices
CHARLESTON, MISS.
THE LARGEST HARDWOOD MILL IN THE WORLD—ANNUAL CAPACITY 40,000,000

We Produce
Kraetzer-cured LUMBER

STOCK LIST—Dry Lumber on Hand August 1st, 1913

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	12/4	16/4
Fas Qrtd. White Oak										
Fas Qrtd. White Oak, 10" and up					12,000					
No. 1 Com. Qrtd. White Oak					150,000					
No. 2 Com. Qrtd. White Oak					24,000					
Fas Plain White Oak					150,000		11,100			2,000
No. 1 Com. Plain White Oak			25,000	20,000	200,000	12,000	20,000			
Fas Plain White Oak, 10" and up										
Fas Plain Red Oak			40,000	20,000	200,000	50,000	12,000	6,000		1,000
No. 1 Com. Plain Red Oak			20,000	15,000	136,000	12,000				
Com. & Btr. Qrtd. Red Gum	500,000	400,000	10,000	10,000	600,000	100,000	75,000	60,000	3,000	
Fas Sap Gum, 13"-16"					60,000					
Fas Sap Gum, 18" & up					15,000					
Fas Sap Gum, 6" & up	30,000	25,000	22,000	50,000	115,000	12,000	12,000			
No. 1 Com. Sap Gum, 4" & up			20,000		250,000					
No. 2 Com. Sap Gum, 3" & up	80,000	50,000	20,000		200,000					
Shop & Better Cypress					100,000		200,000	10,000		
Com. & Better Tupelo					100,000					

OUR LUMBER CONTAINS ALL WIDE STOCK PRODUCED IN MANUFACTURING AND WILL RUN OVER 50% 14' AND 16' LENGTHS. WE ALSO MANUFACTURE OAK TIMBERS AND BRIDGE PLANKS. FACILITIES FOR KILN DRYING, DRESSING AND KRAETZER CURING.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

Our Specialties:

Cottonwood—Red and Sap Gum **Oak** (Plain and Quartered, Red and White) **Three Ply Red Gum Panels**

A Few Items We Want To Move

10 cars 4/4" x 13" to 17" Cottonwood Box Boards.
12 cars 4/4" x 13" to 17" 1sts & 2nds Cottonwood.
7 cars 4/4" x 18" to 21" 1sts & 2nds Cottonwood.
5 cars 5/4" x 6" to 12" 1sts & 2nds Cottonwood.
4 cars 3/8" x 6" & Up 1sts & 2nds Sap Gum.
1 car 1/2" x 6" & Up 1sts & 2nds Sap Gum.
4 cars 5/8" x 6" & Up 1sts & 2nds Sap Gum.
3 cars 3/4" x 6" & Up 1sts & 2nds Sap Gum.
6 cars 4/4" x 6" & Up 1sts & 2nds Sap Gum.
7 cars 4/4" x 13" to 15" 1sts & 2nds Sap Gum.
1 car 5/4" x 6" & Up 1sts & 2nds Sap Gum.
3 cars 6/4" x 6" & Up 1sts & 2nds Sap Gum.
2 cars 3/8" x 6" & Up 1sts & 2nds Red Gum.
2 cars 1/2" x 6" & Up 1sts & 2nds Red Gum.
2 cars 5/8" x 6" & Up 1sts & 2nds Red Gum.
3 cars 3/4" x 6" & Up 1sts & 2nds Red Gum.
7 cars 4/4" x 6" & Up 1sts & 2nds Red Gum.
5 cars 6/4" Log Run Soft Maple.
1 car 5/8" 1sts & 2nds Plain Red Oak.
4 cars 3/4" 1sts & 2nds Plain Red Oak.
5 cars 4/4" 1sts & 2nds Plain Red Oak.
6 cars 5/8" No. 1 Common Plain Red Oak.
3 cars 3/4" No. 1 Common Plain Red Oak.
1 car 4/4" 1sts & 2nds Qtd. White Oak (flooded stock).
1 car 5/4" 1sts & 2nds Red Gum (flooded stock).
2 cars 5/4" No. 1 Common Red Gum (flooded stock).

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY

Memphis **BOX SHOOKS and VENEERS** **Tenn.**

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Farris Hardwood Lumber Co.

Successors to

CHEROKEE LUMBER COMPANY

Manufacturers Hardwood Lumber

NASHVILLE TENNESSEE

SECURE BETTER PRICES

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

ASK US ABOUT IT

We will name very attractive prices on a few cars of each of the following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar.
4/4 and 8/4 Sap Poplar.
1¼", 1½" and 2½" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23" and 24" and up.
4/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

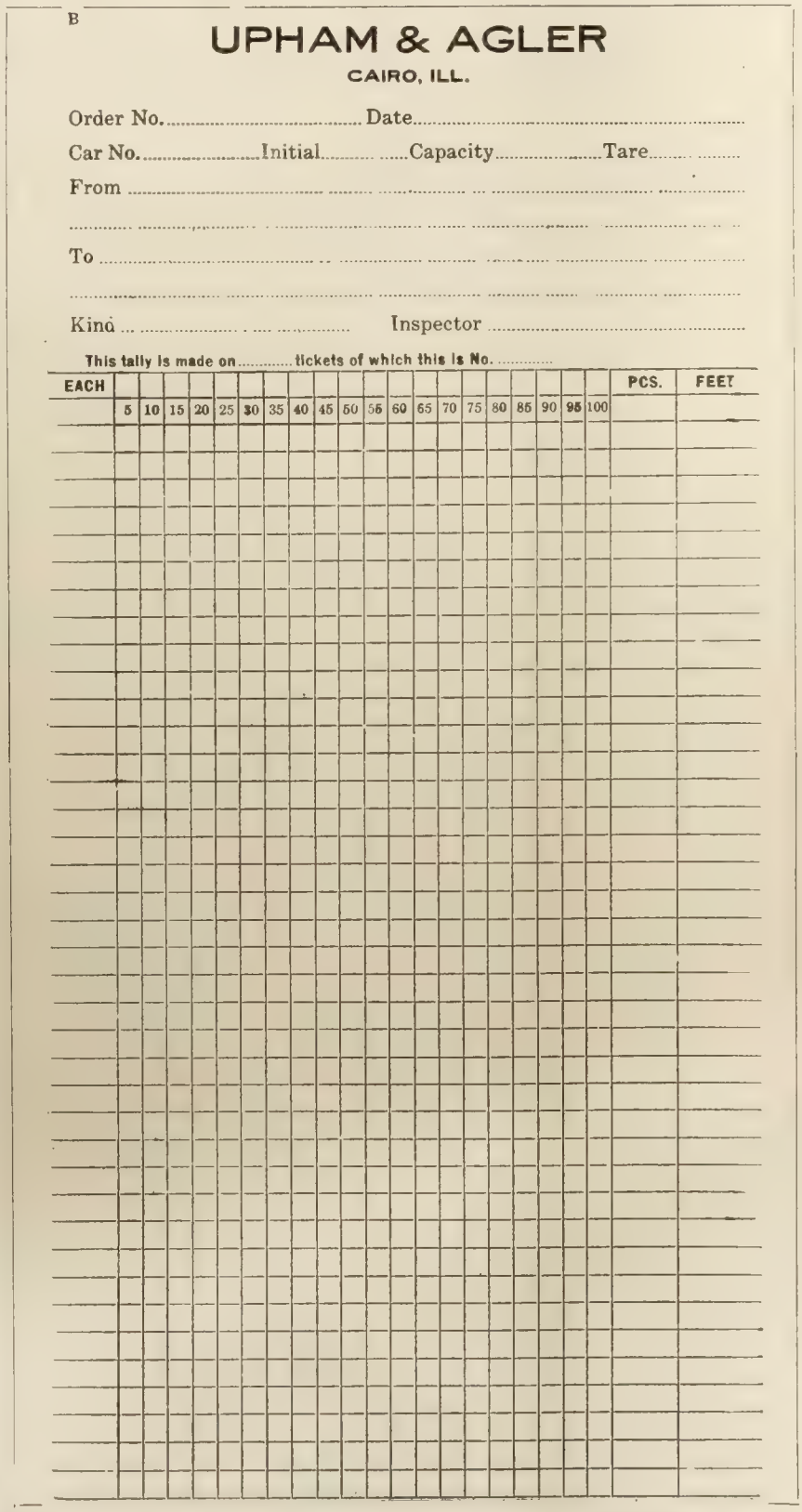
John B. Ransom & Co.

MANUFACTURERS OF

Hardwood Lumber

Nashville, Tenn.

This is Form B



B

UPHAM & AGLER

CAIRO, ILL.

Order No. ..... Date .....

Car No. ..... Initial ..... Capacity ..... Tare .....

From .....

.....

To .....

.....

Kind ..... Inspector .....

This tally is made on ..... tickets of which this is No. .....

EACH	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	PCS.	FEET

Of Single Duplicate or Triplicate Lumber Tally Ticket (without Loose Carbon Sheets) used in the

Gibson Aluminum Tally Book Covers

MANUFACTURED BY

HARDWOOD RECORD

537 S. Dearborn Street

CHICAGO

Let us send you catalogue and price list of scores of forms of lumber, flooring and log tally tickets.

The Gibson Tally Book System has more than 2,500 users.

The Louisville Hardwood Club

"Hardwood Headquarters"

invites the attention of lumber wholesalers and consumers to a list of stock which is offered by its members for immediate delivery. The lumber is all in excellent condition, well manufactured and thoroughly dry, having been on sticks long enough to require but little kiln-drying at the factory. Prices will be quoted by the firms referred to, and will be found unusually attractive, considering the character of the lumber and its uniformly high standard as to grade and dimensions.

LOUISVILLE POINT LUMBER CO.

Complete stock 5/8" to 4" No. 1 common and better band sawn soft yellow poplar
Several cars 5/4, 6/4, 8/4 No. 1 common and better plain red oak
Several cars 5/4, 6/4, 8/4 No. 1 common and better plain white oak, dry
1 car 8/4 No. 2 common plain red oak, dry
1 car 8/4 No. 2 common plain white oak, dry
Several cars 6/4 and 8/4 No. 1 common and better hickory, dry
Several cars 4/4 No. 1 common quartered white ash, dry
1 car 4/4 1sts and 2nds ash, dry
1 car 4/4 1sts and 2nds cottonwood, wide stock included, dry

W. P. BROWN & SONS LUMBER CO.

50,000 feet 4/4 gum boxboards
3 cars 4/4 1sts and 2nds sap gum
3 cars 6/4 1sts and 2nds sap gum
2 cars 4/4 1sts and 2nds plain red gum
2 cars 4/4 1sts and 2nds quartered red gum
2 cars 8/4 No. 1 common hickory
1 car 4/4 common and better buckeye
1 car 4/4x10" and up 1sts and 2nds quartered white oak
1 car 4/4x10" and up No. 1 common quartered white oak

NORMAN LUMBER CO.

(Mills at Holly Ridge, La.)

40,000 feet 4/4 clear sap poplar
1 car 9" to 12" poplar boxboards
50,000 feet 4/4 No. 1 common poplar
2 cars 6/4 No. 1 common poplar
3 cars 8/4 No. 1 common poplar
100,000 feet 4/4 No. 2 A common poplar
Also poplar bevel siding, 4", 5" and 6" widths

EDWARD L. DAVIS LUMBER CO.

2 cars 4/4 1sts and 2nds chestnut
2 cars 4/4 No. 1 common chestnut
5 cars 8/4 1sts and 2nds plain red oak
5 cars 8/4 No. 1 common plain red oak
2 cars 8/4 No. 1 common plain white oak
2 cars 4/4 1sts and 2nds poplar
1 car 12/4 No. 2 common poplar

BOOKER-CECIL CO.

75,000 feet 4/4 1sts and 2nds plain red oak, 40 per cent 14' and 16' long
2 cars 6/4 1sts and 2nds poplar, 80 per cent 14' and 16' long
100,000 feet 4/4 No. 1 common plain red oak
1 car 4/4 1sts and 2nds plain white oak
3 cars 8/4 No. 1 common poplar
4 cars 4/4 No. 1 common poplar

OHIO RIVER SAWMILL CO.

3 cars 4/4 1sts and 2nds poplar
3 cars 4/4 sap select poplar
2 cars 4/4 1sts and 2nds plain red oak
2 cars 4/4 1sts and 2nds plain white oak
1 car 8/4 1sts and 2nds plain red oak
1 car 4/4 1sts and 2nds quartered white oak
1 car 4/4 1sts and 2nds clear quartered oak strips
1 car 4/4 1sts and 2nds No. 1 common chestnut

THE LOUISVILLE VENEER MILLS

offers a choice selection of plain and fancy veneers, including poplar crossbanding, plain and quartered oak, Circassian walnut, figured gum, etc. The company also has unrivaled facilities for the production of fine panels and tops, the fact that it produces its own veneers enabling it to make more definite promises as to delivery than most other manufacturers of built-up stock.

THE EAST

BOSTON NEW YORK PHILADELPHIA

WM. WHITMER & SONS
INCORPORATED

Manufacturers and Wholesalers of All Kinds of

"If Anybody Can, We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg. PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building PITTSBURG, PA.

CHARLES HOLYOKE
141 MILK STREET, BOSTON, MASS.
HARDWOODS

PALMER & PARKER CO.
TEAK ENGLISH OAK CIRCASSIAN WALNUT
MAHOGANY VENEERS
EBONY DOMESTIC HARDWOODS
103 Medford Street, Charlestown Dist.
BOSTON, MASS.

W. R. TAYLOR LUMBER CO.
Wholesalers and Manufacturers
CYPRESS, WHITE PINE, HARDWOODS AND HEMLOCK
1829 Land Title Building, PHILADELPHIA, PA.

We Know How to fill your orders for all kinds of HARDWOODS, WHITE PINE, YELLOW PINE, SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.
Give us a trial.
THOMAS E. COALE LUMBER COMPANY
FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

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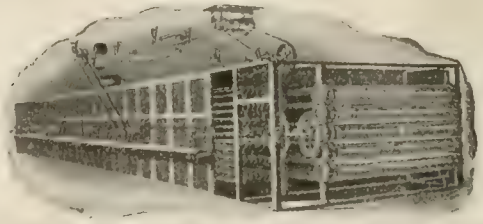
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Review and Outlook

General Market Conditions

THE GENERAL CONDITIONS of the lumber market continue rather featureless and on about the same plane as to orders and prices which prevailed two weeks ago. With few exceptions trade seems to be in a fairly good state, but without any indication that in the immediate future there will be any marked change in either direction. While the present condition of lumber sales is not particularly encouraging, it is at least not discouraging, as both in the North and the South there has really been no general piling up of lumber. The demand which held well during the early part of the summer, coupled with the poor logging conditions in the South in the spring, have resulted in continued holding down of the available supply of hardwood stocks in that territory. However, quite a number of millmen coming from the southern section state that of late there has been a noticeable tendency to accumulate. For the most part, while the majority of the buying trade are evidently still shopping for bargains and not placing any large orders, the sawmill and wholesale trade is not showing any particular tendency to jump at sales below what are considered fair market values. Reports from most of the local markets indicate an increasing number of inquiries on all lines of stock, which is taken to mean that the prospects for an active fall trade are very good.

The export business is not in particularly good shape, inasmuch as various conditions abroad have had a retarding influence on trade and as a result there is a bad accumulation of hardwood on foreign markets. There is an unhealthy tendency of the foreign trade to consignment shipments and there does not appear to be any immediate relief from the situation, although the calming of the troublesome nations in the Balkan regions and the settlement of the difficulties in which they are involved will probably react favorably upon trade in general and the lumber trade in particular.

It is reported that some of the pine mills in the South are shutting down one day in the week, which should have a very favorable effect on the lumber situation as a whole.

Conservatism seems to be the watchword of the trade at present, and if this policy is continued there is every prospect for the lumber trade coming out of the present unfavorable conditions with colors flying.

Red Gum and Low Priced Furniture

THE MOST MARKED FEATURE of the recent furniture exhibits at the Chicago and Grand Rapids markets was the remarkable demand for medium-priced furniture, which, however, was necessarily of an attractive appearance. It seems that the American public is arriving at a realization of the fact that it can obtain attractive furniture well finished and designed and made of high-class woods, if it will but insist upon it. This fact is further being realized by the dealers who are transmitting the public's requirements to the manufacturers through the orders they are placing. This condition is one which is likely to exist for years to come and the natural deduction is that the most expensive woods will not have the call that they have enjoyed heretofore, while the more plebeian of the wood species of the American forests will come into greater demand. In this connection, red gum is the wood which comes to mind first. Its excellent qualities, well adapted to the higher priced lines of furniture, but its comparatively low cost makes it possible to employ red gum in the more medium-priced lines of all kinds of furniture for the discriminating buyer of not unlimited means who is able to judge as to the more attractive designs and the best types of construction. It seems likely that this greatly increased call for moderate-priced furniture of modern and attractive character will increase the demand for red gum and will lead red gum manufacturers to pay more attention to the selection of the wood with the idea of getting the best figure obtainable for the more particular purposes to which it will be put.

A Forest Primeval

THE FOREST PRIMEVAL is not wholly a thing of the past, even in farming states like Indiana. The cover picture illustrating this issue of HARDWOOD RECORD represents such a forest on Sugar creek, at Turkey Run, Parke county, Indiana, from a photograph by Charles C. Deam. A primeval forest is supposed to be one where the work of nature has never been marred or disturbed. Some suppose that in such a forest the trees are all old. That is not the case; otherwise, the forest would cease to exist when the present trees die and fall. In woods cared for in nature's way, a stand of young trees is always coming on to take the place of old ones which fall. By that means the forest is kept in about the same condition. Referring to the cover picture, it will be noted that the ground is well covered with undergrowth from seedlings to small saplings. That is good evidence that the owner of this tract has succeeded in keeping fires out.

The largest tree appearing in the picture is a white oak. It measures six feet in diameter four and a half feet from the ground, and is one of the finest specimens to be met with anywhere. Some of the best white oak of the United States has grown in Indiana, and it is evident that some of the same sort grows there yet. The second largest tree in the picture is a beech. It is a fine specimen, also; and though its size is not stated, the tree must be three feet in diameter. The beech seldom exceeds a diameter of three feet, but

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trees considerably larger are occasionally seen. The experienced lumberman identifies trees by their general appearance. He knows them in the same way that he knows men with whom he is acquainted. He does not hesitate a moment in correctly naming white oak, red oak, beech, chestnut, red gum, yellow poplar, sycamore, and many other familiar trees. If asked to particularize on the features which enable him to identify them, he would probably be at a loss. He does not think of particulars, because the general features are sufficient. The botanist proceeds in a different manner when he identifies trees. He examines the buds, leaves, flowers and fruit, and may want a microscope to make out parts too small to be seen with the naked eye.

Each method of identification has its place and its use. The lumberman in his line becomes as expert as the botanist in his. One deals with and thinks of objects as a whole, the other of their parts. The botanist sees things which the woodsman overlooks and never sees; and the woodsman has a quick, sure way of reaching conclusions which may place him above the botanist.

Tracts of virgin forest are becoming scarce in the settled portions of old states; and it is fortunate that one like that in the illustration is occasionally found. It is worthy of close study and intimate acquaintance. It is a patch cut out of the past and brought down to the present, to show what our country looked like before the white man brought in his civilization.

London Importer in Foolish Light

IN A RECENT ISSUE of a London contemporary there appears a communication from a continental correspondent, who complains that he sent a draft in payment of some lumber an American exporter was under contract to ship, but that he failed to receive the lumber and finally learned that the shipment had been attached and seized by some other creditor, so that he (the continental correspondent) is now the draft and the lumber out. The communication was made the basis of some rather sharp animadversions upon the integrity of the American exporters and their methods, the correspondent citing his experience as a warning against the practices that obtain in the States. The communication has been read by American exporters here with feelings akin to amusement at the inexperience and downright ignorance of the man from the Continent. As a matter of fact a through bill of lading not less than an ocean bill of lading constitutes title to the shipment of merchandise en route, for which it calls, and such shipment is not subject to seizure, except under the proviso that the person who has the attachment levied give full security for the value of the shipment. In the case of the through bill of lading held by the continental correspondent the security would be exacted by the railroad which issued the through bill of lading, and the bond would not be vacated until it had been established in a competent court to whom the shipment belonged. The continental correspondent can make his claim against the railroad in question and obtain the full amount of the draft if he will only institute the proper procedure, and his complaint that he after a time failed to obtain even an answer from the shipper of the lumber who got the draft and for this reason deemed himself in a helpless position is considered simply absurd. The communication is cited as an example of numerous complaints lodged against American exporters and which are entirely groundless. Many of the complaints are based upon misconception or misinformation, the integrity of the exporter being not in the least involved.

Express Ruling Offers Suggestion

THE RECENT RULING of the Interstate Commerce Commission regarding the readjustment of the figures and application of express rates throughout the United States would appear to have a broader significance than its direct effect upon the express business and upon those shipping by express. According to the ruling, express companies must make up an entirely new set of tariffs which will be based on what is designated as the block system. Under this, various sections of the country will be blocked off and specific rates maintained within each block between points within the block and to points in other blocks. Under this arrangement instead of 900,000,000 separate express rates which have been compiled by the express companies and have been in effect all over the country, there will be only 650,000. Of course, the express companies are making a vigorous protest against reduction in revenues which will result to them, but it is altogether probable that the commission's ruling will be sustained.

The decision, insofar as it simplifies the method of application of express rates, offers a suggestion that it seems should prove valuable in connection with the application of rates on goods shipped by freight on the various systems throughout this country. Probably in no other line of business is there a more chaotic condition than exists in connection with freight shipments. There is a constant readjustment of freight tariffs and altogether a situation in that connection so complicated that even the most expert are frequently sorely up against it to determine the right and wrong of certain situations. The thing to be aimed at unquestionably is simplicity and a more stable basis for determining just and reasonable freight rates. In this connection, why wouldn't it be an entirely feasible thing to employ the block system in arriving at proper freight tariffs just as it was employed in connection with express charges?

A simple calculation in arithmetic will determine the fact that this ruling of the Interstate Commerce Commission has divided the number of express tariffs in effect by almost fifteen hundred. The freight rate situation of this country is chaotic because of the uncertainty and complicated nature of its tariffs. These tariffs are complicated because of their tremendous number. This tremendous number results from the absolute lack of any uniform system of formulating and applying the tariffs; therefore it seems entirely reasonable that the method specified for the express companies in making their charges might with possible change in its application be very profitably employed by the railroad companies in arriving at the proper charges for freight shipments throughout the country.

Canadians Steal the Lead

MUCH HAS BEEN SAID recently regarding the now definitely arranged Forest Products Exposition and the plans regarding the exhibits which will be seen at that exposition when it materializes. It is suggested that there will be seen model sawmills in operation, showing the manufacture of lumber from the log to the finished product. It is hoped that this will offer a distinct novelty and something which has never before been presented to the public. The value of such an exhibit would unquestionably be inestimable and the sponsors of the American exhibit can be more or less assured of the success of the efforts in this direction by the success with which a similar effort has been attended in Canada.

In the Industrial building at the Calgary fair in the Province of Alberta, Canada, one of the most interesting exhibits is made by the Crown Lumber Company in the form of a complete model sawmill. This miniature mill has been exhibited before, but this year a new feature has been added in the form of a small waterfall coming down from the mountains, the water dashing over the rocks into the log pond which contains real miniature logs. These logs are carried up into the mill on an endless chain just as in the real plant. From inside the mill one hears the buzzing of the saws cutting the logs into lumber. The lumber is carried out of the mill yard in the regular way to be piled and a model railway train makes a trip every half minute carrying away the lumber from the yard. It is reported that this exhibit has created unlimited interest among those attending the fair and if that is true in a community in which it is no novelty to see the actual operation of a sawmill, it should be even more interesting in a community such as Chicago, where not one citizen in a thousand has any idea as to what a modern sawmill looks like.

It is to be hoped that merely with a view of attracting popular attention to the exposition and advertising it through its own merit, those in charge of arrangements will provide some such an

exhibit as the one now shown in Canada and that they will not allow our Canadian neighbors to surpass it in completeness and novelty.

An Indication of Progress

IN SPITE OF THE IMMENSITY of the lumber industry, lumbermen as a class have never been accused of being the most modern class of business men in their general methods of business administration. In fact, on the other hand, they have been accused of various policies not strictly in conformity with the most modern ideas of the business world. It has been constantly suggested that lumbermen do not work in harmony with each other, are to a great extent jealous of the successes of one another, and for that reason their plans of operation and administration are not at all in accordance with the methods which should be used to produce the very highest return out of the necessary investment. Therefore it is interesting to note the efforts on the part of southern pine manufacturers to guard against the expense of accumulation of high-priced lumber and the consequent loss from such accumulation, by shutting down for one day in the week.

It is reported that this policy is now being pursued by a large number of pine mills in the South and if it is conscientiously followed it will without question redound to the benefit not only of the pine trade but of the lumber business as a whole. Pine is more or less a barometer of lumber trade conditions throughout the country, and, in its fluctuations, pretty closely marks the range of the markets in the various other woods. Therefore this effort certainly should effect in the near future a highly satisfactory influence on the state of trade in such other woods as Pacific coast products, hardwoods, northern pine and hemlock and various other woods, either competitors or non-competitors of yellow pine.

Discovered,—World's Largest Forest,— 400 Acres

AN ARTICLE appearing in one of the last issues of a prominent metropolitan newspaper points out what, to the lumberman, will appear to be a startling state of affairs regarding timber conditions. Lumbermen are well aware of the hue and cry that has gone up throughout the country during late years regarding the supposed imminent shortage in the supply of virgin timber, particularly hardwood. The most conservative of the agitators along these lines have placed the limit of the present stand at some twenty years, while others a little more liberal in their estimates have guessed at twenty-five and thirty years as the probable life of the now available supply of hardwood stumpage.

Sawmill owners operating in hardwoods will be startled, not to say alarmed or even panic-stricken, at the knowledge that the largest tract of virgin forest now in existence covers an area of 400 acres in the vicinity of Danville, Ill.; at least this is the report of the newspaper in question. One of the Sunday editions of this paper contains an illustrated, page story regarding this tract, and seems to consider the fact that there are 400 acres of hardwood stumpage now standing untouched by the axe or saw as truly wonderful.

Seriously speaking, however, this offers a very striking example of the absolute ignorance of the conditions of which they write, prevalent among newspaper men or magazine contributors in their attempts to exploit in print questions pertaining to the woods and the lumber business in general. It is a deplorable fact, but one which is nevertheless true, that this ignorance exists regarding the second largest industry in the country.

Incidentally, the stand in question is rather interesting from an historical standpoint inasmuch as it was granted in 1837 by President Van Buren to the family which now holds it. It has come down through the years to the present owner, who absolutely refuses to part with it to lumbermen on any consideration. It really is a mighty good stand as far as it goes, containing most excellent walnut and white oak, but as far as the scare-head title is concerned, which reads: "The World's Biggest Forest; 400 Acres Near Danville, Ill.," the ridiculousness of it is so appalling as to be beyond comprehension on the part of anyone even remotely conversant with forest conditions throughout this country, which is so famous for its prolific supply of hardwood, pine and other noted timber.

This surely offers another and a striking proof that the establishment of the Forest Products Exposition is a wise move. The public is surely in need of authoritative information when it is possible for such asinine statements as the above to get into print.

Another Phase of Substitution

THE LUMBER TRADE has been hearing a great deal during the last three years regarding the possible ill effects which will result to the lumber business from the establishment of the so-called wood substitutes in many lines. It has been pretty conclusively proven and evidently is at last fully realized by the lumbermen that the manufacturers and advocates of various articles for many purposes aiming to take the place of wood have gained a strong foothold. With this realization on the part of the lumbermen are bound to come proper means for combatting the advances of the substitute materials. First among the important implements of warfare against the substitute is the Forest Products Exposition which at last has reached a definite basis. There are many other schemes, some in operation, some pending, and some merely proposed; but it is safe to say that in the end lumbermen will have organized themselves in such a way as to successfully combat the encroachment of many substitutes which, while claiming to be superior and less expensive than wood, are not at all adapted to the purposes for which they are proposed.

However, there is another phase of modern business which presents itself particularly to the lumber trade in connection with the adoption of modern ideas and methods of manufacture and merchandising products of the forest. Specifically, this development is the growing tendency on the part of consumers of various kinds of lumber to substitute one species for another when it becomes apparent that to continue using one particular kind of wood would mean a greater cost than would be necessary in using some other kind just as well adapted and which can be had at a considerably less expenditure. The constant readjustment of the relative position of the various wood species in their relation to one another is by some taken to indicate a more or less chaotic condition existing among the buyers of forest products. Those of this opinion argue that the very fact that the consumers are continually switching from one wood to another indicates that they have no idea of the relative value and adaptability of the different woods offered; but it is probably a fact that just the opposite is the case.

The average lumberman who has followed the trend of events needs but call to mind the rapid development in the use of such woods as gum, hemlock, cottonwood, birch, etc., and the corresponding decrease in the use of certain other species, and to review the orders he has received from various consuming concerns from year to year to know that this condition is not only a fact but will be more and more apparent as the years go by and as the available supply of certain woods is decreased with a corresponding price increase and the availability of other species is discovered.

What, then, is the logical deduction? It is merely this—that in order to keep abreast of changing conditions every lumberman, no matter in what class of wood he operates, whether he handles northern hardwoods or southern hardwoods exclusively, is confronted with the absolute necessity for acquiring as broad and accurate a knowledge of the various species which are now competitors of the woods he handles as is possible. Not only this, but if he wants to be strictly progressive, he should study every reliable source of information, not merely with the idea of getting facts regarding the already established woods, but of endeavoring to discover new possibilities for utilizing other woods which do not now enjoy so wide usage. It was not so many years ago that gum was practically a despised product of the southern forests. Today it is one of the strongest of our American hardwoods.

The success of the efforts to exploit this wood are not alone the result of mere advertising of the wood itself, but rather of the painstaking investigation of the possible uses to which it might be adapted and the suggestion to those who could make possible its adoption for those uses, that they try it out. With the more recent and more successful drying methods, the success of gum has become more or less of a phenomenon. This is also true of various other of the well-known woods of the United States and it is safe to say that it will be increasingly evident in the future.

We are told that it is never too late to make repairs, but that an opportune stitch will save the more laborious operation. The better policy, however, would be to sufficiently fortify oneself in the direction above suggested even before that opportune moment and by doing so enable oneself to reap the fullest benefit from this, the modern idea of merchandising lumber.

A Poor Exhibition

WE READ CONSIDERABLY IN THE PRESS a short time back of the decision of our recently elected honorable secretary of state to the effect that he found his modest income of $12,000 per annum insufficient to maintain his household at Washington and his more permanent home in Nebraska. Without commenting upon the justification for this decision on the part of the secretary of state, it is a fact that practically all of the criticism which resulted from the announcement of his intentions emanated from the daily press. There was an attempt at censure of our secretary's ideas and methods in this particular, which, however, did not get very far.

It might be worth while to compare these circumstances with others which have just come to the attention of HARDWOOD RECORD involving one of the Forest Service's most expert of experts, a man who has made a particular, life-long study of one branch of forestry work and whose services could not but be valuable to the service that employed him. Unfortunately this man lived in Washington where, we are led to believe, the cost of living has soared to an almost heavenly point. Unfortunately, further, the remuneration which is the reward for faithful performance of duty in connection with work in the Forest Service is in no comparison with the actual value of service rendered. Therefore the man in question sought to increase his really modest income by devoting his evenings and other spare time to the preparation of manuscript which he submitted to various publications. He knew his subjects so well and was such a clever writer that the majority of the articles submitted were acepted. As a result this man acquired a further income than that which he received from the government, which was well worth while.

However, it seems that somebody closely in touch with his affairs, who had more or less authority over him, for some reason or other became rather jealous of his ability as a writer of readable articles or for some other reason, was led to start an investigation as to the lawfulness of this practice. As a result of the investigation which followed, this man who, as stated, was a valuable member of the service has been summarily dismissed.

Without in any way wishing to criticize the Forest Service itself, which is doing a great work, the comparison of the two circumstances is so odious as to make comment irresistible.

A Compliment to Wood

THE BUSINESS OF MANUFACTURING FURNITURE, while staple in its general character, is necessarily one of quick adjustments and at times fluctuations of the most startling and radical character. Of course, the fundamental principles are always the same—that is, furniture manufacturers must always turn out bedroom suites, dining room suites, parlor suites, and similar articles of a more or less standard nature to fill the established demand for the various articles in question. During the early days of factory furniture manufacture, that was about all there was to the furniture business. Practically all of the furniture then made was of wood and it was simply a case of making enough of it to supply the more or less easily satisfied market. People's tastes in those days were not so fully developed as now; they required less for show and more for pure utility.

The creation of beautiful and practical designs in all kinds of furniture has now become the very life-blood of the furniture industry. Sales competition is now based almost entirely upon this feature and the furniture manufacturer each year adds a few more gray hairs wondering if the styles which he has created will "take." Thus the ideas in construction and design in the standard articles of house furniture change radically from year to year.

A short time ago there seemed to be a very serious menace in the apparently overwhelming popularity of the brass bed as compared to the wooden bed. But, like many another fad, this popularity was based on false pretenses which have been discovered by the ultimate buyer of furniture and it is safe to state that the wooden bed has now regained all it lost and more than made up for its former decrease in prestige.

It was argued at the time that brass beds were beginning to be most conspicuous, that they were more sanitary and more attractive than wooden beds. Even the most rabid advocate of wood products will acknowledge that the modern brass bed is a more beautiful and more sanitary article of furniture than the old-fashioned wood bed, which we recall from our early days. However, the inroads made by brass bed manufacturers upon the market for wooden beds very quickly aroused the manufacturers of the latter article to a realization that they must do something and do it quickly. As a result, the latest designs both as to construction and finished appearance, so far surpass the brass article as to looks, sanitary character and general utility that there is absolutely no room for comparison. These efforts on the part of wooden bed manufacturers have led to a very just reward in that the recent furniture exhibits are showing the bed of wood to be overwhelmingly in the majority in the number of exhibits.

This fact is reflected in the show window displays made by the large furniture retailers. Actual observation has shown that not one in ten of the more prominent dealers in the city of Chicago is making a window display of bedroom furniture using brass beds. The reason for this is seen in the modern wooden beds themselves. They need absolutely no argument to convince one of their greater desirability. Incidentally, these exhibits which in some places are luxurious in the extreme, constitute a very decided compliment to wood inasmuch as they are in effect recognition of the impossibility of equalling the beauty, design and general appearance to be obtained in articles which are constructed of the products of the forest.

Evidence is Necessary to Substantiate Claims

IT IS OFTEN MARKEDLY DIFFICULT in the handling of claims against customers and railroads, involving reported shortages, to get sufficient evidence to prove beyond a doubt as to the exact method of tallying the shipments. It is frequently a fact that it is difficult to ascertain beyond question whether or not a claim is against the customer or against the railroad itself.

With this in mind the National Wholesale Lumber Dealers' Association has offered a very wise suggestion to its membership urging the advisability of incorporating on invoice blanks the following:

"Owing to the position assumed by carriers, loss or damage claims will not be recognized unless lumber is tallied as it comes out of the car or over the rail of lighter or boat, and notation of loss or damage made on carrier's receipt."

While it is recognized that a clause of this sort on an invoice really has no bearing on a contract from a legal standpoint, and further is not binding upon the customer unless it is made a part of the original order or contract, still if the suggestion itself is carried out, it would tend to remove a great deal of confusion resulting from circumstances of this character. It would unquestionably assist in educating the buyers as to the method of tallying lumber in order to properly substantiate a claim for shortage to print the clause permanently on the invoice in red ink or rubber stamp.

This is merely one of the many wrinkles which large shippers of lumber should bear in mind in order to avoid as much as possible the complications which [illegible] conducting business on a large scale.

Pert, Pertinent and Impertinent

Government by the People

In ivery counthry like England an' ours which is ruled entirely be th' people, it is niccissary to have a body iv intelligent an' consarvitive men to see that they don't entirely rule th' counthry. D'ye see th' pint? Th' whole idee iv a republic is that the people should have what they think is good f'r thim. But there are more thoughtful pathrites who know that if they want it very much it can't be good f'r thim, so they stop it. Ye start a republic be askin' th' people what they want, but ye preserve it be not lettin' thim have it.—*Mr. Dooley.*

Her Abandoned Trip

"Why has your wife decided to give up the European trip she was contemplating?"

"She happened to hear somebody say that travel broadened one."—*Chicago Record-Herald.*

The Steady Subscriber

How dear to our hearts is the steady subscriber,
Who pays in advance at the birth of each year,
Who lays down the money and does it quite gladly,
And casts 'round the office a halo of cheer.
He never says: "Stop it, I cannot afford it,
I'm getting more magazines now than I read";
But always says, "Send it; our people all like it—
The fact is we think it a help and a need."
How welcome his check when it reaches our sanctum.
How it makes our pulse throb, how it makes our hearts dance!
We outwardly thank him, we inwardly bless him
The steady subscriber who pays in advance.

—*Edinburgh Sentinel.*

Some Shot

An Irishman who wasn't much of a hunter went out to hunt one day and the first thing he saw to shoot at was a bird sitting saucily on the top of a fence. He blazed away and then walked over to pick up the victim. What he happened to find there was a dead frog, which he raised at arm's length, looking at it with a puzzled air. Finally he remarked:

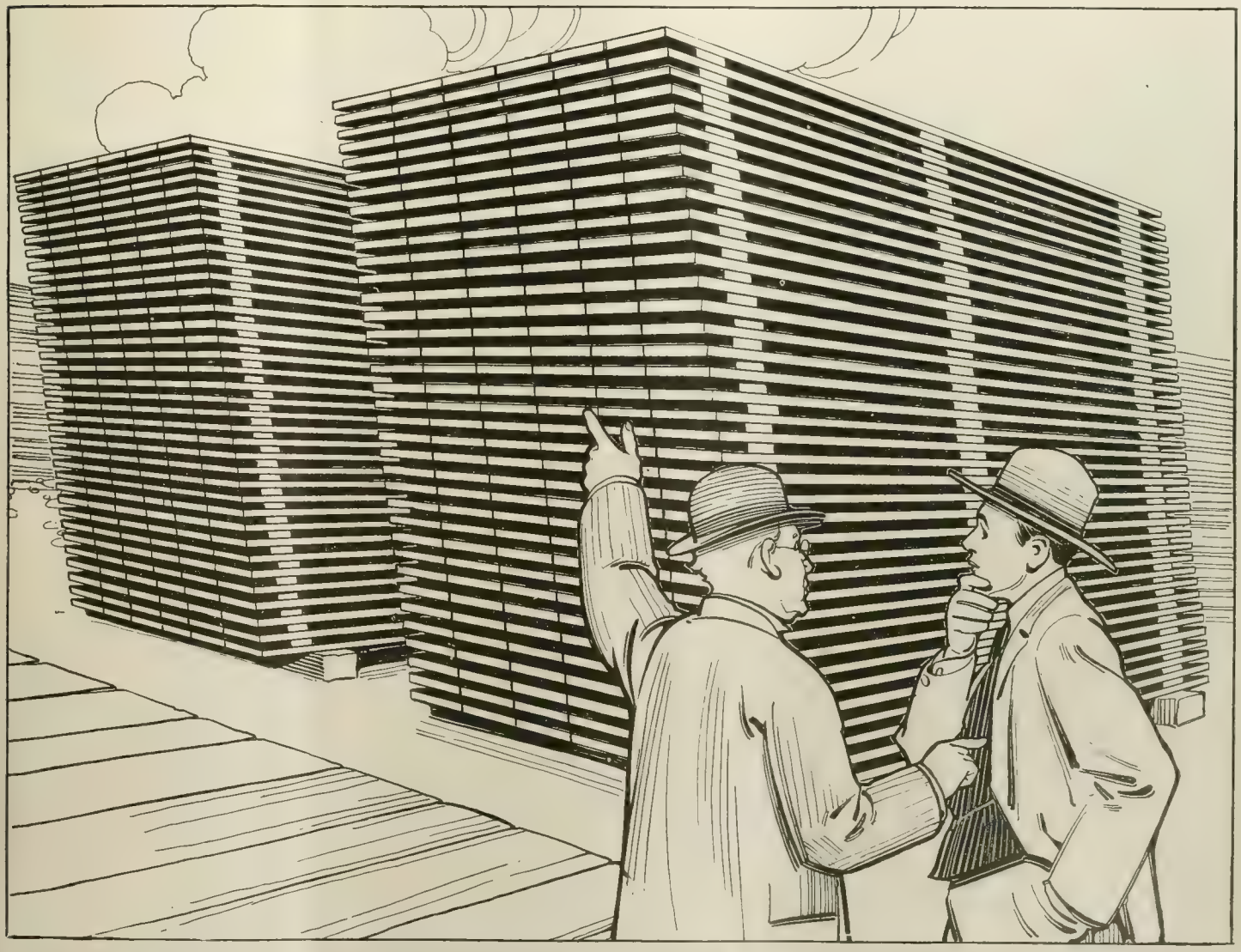
"Well, but ye was a deuce of a foine looking lurd befur Oi blew the fithers off o' ye!"

Habits of the Hired Man

"Well, did them moving picture people get pictures of everything on the farm?"

"Everything but the hired man," said Farmer Heck. "They couldn't ketch him in motion."—*Kansas City Journal.*

A REAL ASSET



The Veteran: Young man, never forget that a pile of well manufactured and cared for hardwood lumber is just as good an asset as cash in bank.

Losing Faith

Old Lady—"I don't believe this sure-cure tonic is a-goin' to do me any good."

Friend—"It's highly spoken of in the papers."

Old Lady—"Yes; but I've taken forty-seven bottles and I don't feel a bit better. I tell you what it is, Sarah, I'm beginning to think these newspaper editors don't know everything."—*New York Weekly.*

Appreciation

It is reported that a certain musician disgusted with the chattering that usually takes the place of listening during a musical performance, arranged with his violin, his violoncello and the rest that the music should suddenly stop in the midst of the loudest passage in the piece.

It was done, and, clear and distinct above all the loud talkers' voices, these words were heard: "We always fry ours in lard!"

Pointed!

A man with plenty of ginger is likely to have snaps.

"No, I don't like onions or garlic," said the plumber, "but I get fat on leeks."

It is dangerous, even in a ballroom, to step on a moving train.

Available Foreign Hardwoods

SEVENTH ARTICLE

HARDWOODS OF AUSTRALIA

Editor's Note

Following is the last of a series of articles on foreign hardwoods available for use in this country. The first covered hardwoods available in the Central American countries; the second covered hardwoods available in South American countries; the third covered hardwoods of Africa; the fourth covered hardwoods of Ceylon; the fifth covered hardwoods of Burma and India, and the sixth covered hardwoods of Hawaii.

The hardwood forests of Australia are exceedingly rich in trees of economic importance. The average American looks upon Australia as a sparsely populated island whose two chief commodities are gold and wool. Many will be surprised to learn that the continent of Australia is approximately as large as the United States, exclusive of Alaska, and when it is mentioned that there is an estimated area of 47,000,000 acres covered with marketable timber on the Australian continent, one can readily see that it has considerable claim as a timber-producing country. In eastern Australia are vast stretches of prairie land similar to those in the Middle West. The forests are confined chiefly to western Australia. In New South Wales, the supply of timber is said to be practically inexhaustible. Here the forests are vast and at the same time workable. The entire coast washed by the Pacific ocean is covered with gigantic timber trees. Notwithstanding this enormous supply of native timber, vast quantities of lumber are annually shipped into Australia from New Zealand, Puget Sound, Scandanavia, and other parts of the Baltic. The timber which Australia secures from other countries consists mostly of pine, spruce and some fir, used for construction work in which is required material that is light in weight, yet strong and durable. Practically all the easily accessible native timbers of Australia are very heavy, hard, and in a number of cases, very difficult to work.



TEAMS LOADED WITH JETTY PILES OF BLUE GUM

Repeated efforts were made in the past by transportation companies to introduce Australian forest products into this and other countries, and the one great hindrance to a continued successful shipment of timber to foreign ports is the great dead weight of these hardwoods. It has been ascertained that this is one of the principal things against their profitable shipment at current prices. The New South Wales government furnished the following weights for its chief commercial timbers:

Blackbutt	66.69	lbs.	per	cubic	foot
Tallowwood	72.96	"	"	"	"
Blue gum	69.34	"	"	"	"
Mahogany	75.06	"	"	"	"
Spotted gum	62.19	"	"	"	"
Iron bark	73.85	"	"	"	"
Turpentine	69.30	"	"	"	"
Beech	63.03	"	"	"	"
Red cedar	29.00	"	"	"	"

There are on an average 28½ cubic feet to a ton. It has been found that the freight on full cargoes of 3-inch planks used for making paving blocks is prohibitive, unless big prices can be obtained. The freight on one cubic meter of sawn paving blocks is about $35 from any point in Australia to Philadelphia or New York. The cost of placing the wood pavement of native pine is generally calculated to be about $2.50 or $3.00 per square meter, but it is estimated, by using Australian timber, that the cost will be about $4.50 or $5.00.

The virgin forests now existing are largely tributary to unsheltered harbors, with bad bars and dangerous open roadsteads, where only



PIT SAWYERS SAWING RED GUM TIES

small vessels can load during favorable conditions. Owing to this fact, the timber from these forests must be carried in small sailing vessels to a central shipping point, like Sydney, where it must be loaded on large steamers. The expense of handling the heavy timber will naturally prevent the trade from being a very profitable one. It is now rather difficult to procure an area of virgin timberland within easy reach of a deep water shipping port.

Some of the timbers which have been exploited for the foreign trade are the following:



EUCALYPTUS TELEGRAPH POLES CUT FROM A PLANTATION IN SOUTHERN AUSTRALIA

Jarrah is a local name given to *Eucalyptus marginata*, which is restricted to western Australia. Jarrah, or djaryl, is the aboriginal name, and it is commonly called mahogany, from its similarity to the wood from Mexico, Central America, and the West Indies. It is adaptable for furniture and every purpose for which ornamental wood can be required, some of it being of the very finest grain, and showing much figure, mottled curls, feathers, and excrescences, a feature peculiar to Australian timbers, and highly effective in point of ornament. The tree grows to an immense size, attains a great height, and is very plentiful. The advantages of this timber are its great strength, hardness, and closeness of grain, combined with durability under exposure to either salt or fresh water. It is never attacked by white ants or by teredos, which abound in tropical and semi-tropical seas, and this confers upon it an additional value. It somewhat resembles the red gum in appearance, but the grain is darker, finer, and closer than that of the latter wood, and it is susceptible of a very high polish, which brings out a rich dark hue. It is invaluable for use in shipbuilding, pier, and railway construction, as well as for the interior of buildings, and for furniture. It is found to be the most durable of all woods. The jarrah is much sought after for railway sleepers and telegraph posts in India and other parts of the East Indies. It is admirably adapted for dock gates, piles, and other purposes, and for keel pieces, kelsons, and for other heavy timber in shipbuilding. Large sailing vessels were formerly built of this wood. The timber has been used by government in the construction of military barracks in Ceylon, where it was at one time supplied at a little more than half the price charged for Indian teak. The principal objection raised against it is that it is liable to "shakes," the trees being very commonly unsound at the heart.

The wart gum (*Eucalyptus gomphocephala*) is one of the white gums, and has a very close grain, is exceedingly hard, cannot be split, and does not burn very readily. This wood has been suggested for use in gun carriages, on account of its nonliability to split. The timber of this tree exhibits the wonderful quality of being absolutely impervious to the inroads of teredo, so destructive to wharves, jetties, and any sort of naval structure exposed to sea water. The durability of this timber, when used in the construction of piers, wharves, and jetties, involves an interesting and important inquiry, on account of the costliness of these structures, and the rapidity with which they are apt to succumb to the attacks of the teredo.

Next to these in size and number are those of the red gum (*Eucalyptus rostrata*). This timber resists for a long time the destructive agency of the teredo, and is inferior only to Swan river mahogany. It is stated that a jetty built of oak procured from a wreck, was completely destroyed by teredos, whereas the mahogany similarly exposed had not been touched by them.

Red gum is of a beautiful red color, and its pores are filled with a dark red substance which is more pronounced than in the ironbark eucalyptus, since in the latter it appears to be diffused in the woody fiber. There is scarcely a more



TELEGRAPH POLES OF SUGAR GUM

splendid object for the microscope than a well-illumined section of these cells in the red gum.

The red gum is a very valuable species of timber for the extraordinary endurance of the wood underground, and for this reason it is highly valued for fence posts, piles, and railway sleepers; for the latter it will last from eight to ten years, and if well selected, considerably longer.

The immunity of this wood from the attacks of insects on land and in sea water is thought to be due to the presence of a large amount of tannic acid in the wood.

Black butt (*Eucalyptus pitularis*) is a wood that is now being imported into this country under the copyrighted name of *moa*. It grows chiefly on sandstone formations and makes a fine growth and generally a straight bole. Its height is about 100 to 200 feet, or about 30 to 80 feet to first branch. The diameter of a matured tree is about three feet. Black butt is considered as one of the best timbers for street paving blocks, and is used extensively in Australia and also in Europe. It has a close, smooth grain, and is of a light color. Black butt is often hollow, attacked by white ants, and prone to disease, as evidenced by huge blotches or scabby-looking swellings on the trunks. The wood is also attacked by pin worms. Gum rings, gum veins, and gum pockets are also very much in evidence in opening up a black butt log, and as the timber is very liable to split at the gum rings, the presence of these is very undesirable in planks intended for paving blocks. The wood is remarkably free from knots. Black butt planking wears quickly, rubs out, and wears much more quickly than spotted gums. The wood almost wears out alone by the action of the weather, leaving a stringy sort of shell which is hard and tough. Black butt has a much greater transverse strength than jarrah.

Spotted gum (*Eucalyptus maculata*) is a fine timber, very useful for coach building and wagon work. It is a coarse-grained timber and grows to the same height as black butt, with a less average diameter, from twenty-four to thirty inches. It is frequently hollow and has gum rings and gum pockets. It wears better than black butt, but is more susceptible to decay.

The sandalwoods of Australia have played an important part in the timber trade of that country. Enormous quantities of the various species of wood so extensively substituted for the true Indian sandalwood have been cut and shipped to different parts of China, where the wood was reshipped to the United States and European countries. The principal species exploited are the following:

West Australian or fragrant sandalwood (*Fusanus spicatus*) is a small evergreen tree about thirty feet in height. It is found chiefly in West Australia where large quantities of several kinds of sandalwood were originally obtained. As early as 1849 over 1,200 tons of this wood were exported. The output continued to increase very rapidly, until 1876, when the annual shipments amounted to about 7,000 tons. Three years later it decreased to 4,700 tons. In 1899, 4,470 tons of this wood were shipped to China and Singapore, where it is called Swan river sandalwood. In more recent years the shipments have decreased still more, but larger quantities are at present consumed in Australia.

Quandong, moolie tree, or native peach (*Fusanus acuminatus*) is a small tree from ten to thirty feet in height and from six to eight inches in diameter. It is more or less abundant in the interior of New South Wales, and in the dry parts of Queensland, Victoria, South Australia, and western Australia. The wood is flesh-colored, hard, heavy (about fifty-two pounds per cubic foot), strong, tough, close-grained, and when freshly cut or worked has a very agreeable fragrance resembling that of roses. It is very durable in contact with air and moisture, and is not liable to warp and check. The wood works well, takes an excellent polish, and is highly esteemed for cabinet work, turnery, and is said to be the best wood in Australia for engraving. Sandalwood is now being collected by pulling up the whole tree by the roots. Small, shrublike trees from eight to ten feet high are cleaned off and shipped to market. The outer rough bark is removed before it is marketed. Immense quantities of this wood are shipped to China, and the oil distilled from it is now coming into the American and European markets. It is less odorous than that from the true sandalwood.

Scented or Queensland sandalwood, balvora, or rosewood (*Eremophila mitchelli*), a native of Queensland and New South Wales, Australia, is a small tree from twenty to thirty feet in height and from nine to twelve inches in diameter. It has very thin sapwood and a dark brown, hard, heavy, close-grained heartwood. It is regarded as an elegant wood for cabinet work, and has a weak fragrance differing somewhat from sandalwood. Another species of this group having very fragrant wood is *Eremophila bignoniflora*, commonly known as pombel. It is a native of North Australia, New South Wales and Victoria on the Murray. The wood is yellowish-brown, close and fine grained, and beautifully figured. It is very useful for cabinet work.

Logging Conditions Around Memphis Good

Weather conditions have been ideal for logging operations during the past fortnight and these have made pretty good progress, about as good, in fact, as owners of mills have desired. There has been, however, some slowing down in the matter of getting out timber and, according to the statement of a prominent authority, active work in this direction will not begin until the danger from worms has passed. The authority in question said that the mills would soon begin storing timber but that they had shown practically no movement in this direction because of the factor to which reference has already been made.

The Valley Log Loading Company is authority for the statement that it has handled more timber to the mills in Memphis and the Memphis territory during the past two months than during any similar period in its history. It says, however, that the amount of timber awaiting transportation is not quite so full as usual and that the prospects for active loading in the immediate future are not quite so bright. The management believes, however, that it will have all the work it can take care of shortly, as it is of the opinion that active logging will begin in the early future and that it will be pushed with the utmost vigor.

The mills in this city and section have continued to run on full time during the past few weeks and the amount of hardwood lumber produced has been quite full. But, even after allowing for this fact and even after admitting that there is a plentiful supply of hardwood lumber with which to meet present requirements and to put manufacturers and wholesalers in comfortable position with respect to some of the fall and early winter needs of the trade the fact remains that there is no particular surplus and that the situation is one that is accepted as quite wholesome. Shipments during the summer have been rather full and have prevented any undue accumulation from the large production which has been in progress since the interruption incident to the overflow in the Mississippi last spring.

Exporters here are doing only a moderate business at present. Two conditions are regarded as primarily responsible for this fact. One is the unsettled transportation situation which makes the handling of export shipments rather unsatisfactory and the other is the presence in Europe of large quantities of consigned stock which has been sent abroad without any orders and only with the hope of being able to place it. A prominent lumberman who has recently been abroad brings back the information that he was surprised to find, after the disagreeable experiences of American consignors in the past few years, such a large amount of southern hardwoods in the hands of consignees on the other side. The Balkan situation, too, with its consequent restriction of enterprise in almost every direction, is another influence which has not been without its effect on the foreign markets for southern hardwoods.

Beech is not usually regarded as a durable wood, yet beech piles driven as a foundation for Winchester cathedral, England, remained sound for 800 years. They were driven in a bog and the water and peaty soil doubtless assisted in the preservation of the wood.

Seventy per cent of the lumber used in Egypt for furniture and finish is imported from the United States. Turkey ranks second as a source of supply for this class of lumber.

Woods Used by Wagon Makers

The making of heavy wagons is only a part of the general vehicle manufacturing business, but it is an important part. Many other kinds of vehicles are made, including carriages, buggies, and automobiles; and it is not easy to separate them into classes at the factories which make them, because the same factory may turn out several kinds. However, business wagons, including farm wagons in particular, and heavy vehicles of different kinds, constitute a fairly well defined and a very large class. Some factories specialize on wagons of this kind. Some make farm wagons, others coal, stone, and ore wagons, some turn out drays, others carts, but all are for business purposes, as distinguished from pleasure vehicles. The dividing line is not always clear, but the general divisions are recognized.

Getting out the stock and converting it into finished products is a large and varied business which is becoming more specialized. Formerly wagons were made in small shops scattered about the country, in small towns and at country crossroads. The wagon maker usually cut his own stock in the neighboring forest, or it was cut under his immediate direction. The stock for a whole year might be stored in his shop loft or shedded in his back yard; and he slowly worked out the different parts of the wagons by hand, both the wood and the iron.

That method is now a thing of the past, except in a few remote districts where the individual worker still plies his wagon-making trade and supplies a few customers. The business has been transferred to the factory. Things are done on a large scale. The individual wagon maker, that is, the man who knows all parts of the operation, is now a rare individual, and his place has been divided among numerous workmen who specialize on certain parts.

In the old days the owner of the shop gave his personal attention to cutting and collecting his material. It is done in quite a different way now. Then it was usually possible to get all the wood, of different kinds, within a mile or two of the country or village shop; now, the length and breadth of the nation are searched for wood by the enormous wagon factories. They think nothing of bringing it from a distance of from one hundred to five hundred miles. In fact, they do not expect to find it any nearer. When the old time wagon maker (often called a wheelwright) bought by the cartload or cord, the modern factory purchases by carload or trainload. It formerly required little business ability or foresight to keep the shop supplied with material; but it now taxes the resources of able and experienced business men. They must look far ahead, not only to anticipate their wants, but to ascertain when and how these wants may be supplied. The wheels of the factory must be kept going, and no manufacturer takes chances by presuming that supply will be equal to demand in the time of need. He sees to it that the material is on the road to the factory long before it is actually needed. How this is done is an interesting story.

Take, for example, the wagon factories in one state—Illinois. It is a large state with up-to-date establishments; but it is not the leading state in wagon making. Four are above it in vehicle output, first Ohio, next Indiana, New York third, Michigan fourth, then Illinois. The woods bought in one year by wagon makers in Illinois are shown in the table which follows. These woods were for heavy wagons and vehicles only, not for carriages, light wagons, and automobiles. They show at a glance the kinds and comparative amounts of woods demanded in the making of wagons. The average cost at the factory of the different woods is shown. These prices hold only for Illinois, and for the year when the statistics were collected, 1909. Figures will vary from year to year, and will not be the same in different regions for the same year.

It cannot yet be accurately determined what effect the automobile is having on the wagon industry, but there is no question that manufacturers are carefully watching developments as they occur.

Annual Use of Woods in Illinois for Wagons and Heavy Vehicles

Kinds of Wood	Quantity B. M.	Average cost per 1000 feet
White oak	7,941,000	$43.69
Hickory	6,109,000	53.13
Cottonwood	5,391,000	43.26
Yellow poplar	5,089,000	60.22
Longleaf pine	4,430,000	30.17
Shortleaf pine	2,225,000	24.02
Red gum	1,240,000	29.53
White ash	1,142,000	36.23
Red oak	574,000	45.79
Basswood	503,000	42.00
Sugar maple	418,000	35.42
Redwood	250,000	38.00
Bur oak	95,000	33.63
Sitka spruce	60,000	45.00
Chestnut oak	45,000	55.00
Cypress	35,000	38.34
Willow oak	30,000	55.00
White pine	29,000	65.34
Osage orange	27,000	124.63
Norway pine	15,000	35.00
Sweet birch	14,000	39.64
Loblolly pine	10,000	37.50
Lodgepole pine	8,000	65.00
White elm	5,000	27.00
Tupelo	1,000	58.00
Total	35,686,000	$43.91

Illinois, the state which uses these woods, grows only 2.2 per cent of them, and that small amount is made up principally of bur oak, white elm, white oak, hickory, cottonwood, and sugar maple. The three states, Michigan, Wisconsin, and Minnesota, supplied 2.5 per cent, consisting chiefly of basswood, sugar maple, white pine, and Norway pine. Six and a half per cent came from Indiana, Ohio, and West Virginia, and white oak, yellow poplar, and ash constituted nearly the whole quantity. Missouri, Kentucky, and Tennessee supplied 32.5 per cent, and nearly an equal amount came from Arkansas, Louisiana, and Texas. Three other southern states, Mississippi, Alabama, and Georgia, furnished 15.7 per cent, the Pacific coast .9 per cent, consisting wholly of redwood and Sitka spruce, while the remainder came from regions not specified.

White oak is the leading wood for heavy vehicles, and it probably has been the leading wood in this industry ever since wagons were made in this country. It is placed where strength and durability are demanded, that is, in the wheels and framework of the wagon. No wood is an altogether satisfactory substitute for large hubs, though for small ones a number of woods take the place of white oak. Manufacturers in Illinois draw pretty largely on the South for oak hubs. A good many come from as far south as Alabama. That is not necessarily because the best oak is in that region, though it is excellent—but because the hub-making industry is well represented there, and factories can get what they want. Sizes of oak hubs range from 7½x8½ inches to 10½x12, with extra sizes for those who want them. Oak is a common material for bolsters, which run in lengths 4 feet 1 inch to 4 feet 6 inches by 3x4 up to 4x6 inches in cross section. Sandboards are the same length as bolsters, and in cross section are 2¾x3½ inches to 4x5 inches. Reaches run in length 8 to 14 feet long, 2x4 up to 2½x5 in cross section; poles are 12 feet long and in cross section 2½x4 up to 3¼x5. Twenty-six felloes make a wagon, twelve for front wheels and fourteen for rear. Sizes vary greatly, but usual dimensions run from 1¾x2½ inches in cross section up to 3x4½ inches. They must be cut in segments of the required circle which, of course, varies with the size of the wheel and the length of the felloe.

White oak is the wood commonly used as spokes of large wagons, and the rules governing grades, sizes, shapes, and defects allowed and not allowed, are many and strict. The piece of wood which

finally becomes a finished spoke passes through a number of processes from the time it is split or sawed from the bolt until it is ready for service in the wheel of which it becomes an essential part. Hubs, bolsters, sandboards, reaches, poles, felloes, and spokes are the most important places filled by this wood in wagon making; but it occasionally has many other uses.

Hickory has nearly as wide a range of uses in wagon making as oak has. Much more goes into axles, but less into spokes and hubs. Axles are six feet long and in cross section run in sizes 2¾x3¾ up to 6x7 inches, with extra sizes when wanted. Sugar maple, in the same sizes, is much employed for axles in large wagons. It is very strong and stiff. Eveners, singletrees, and neck yokes are often made of hickory and are listed regularly as vehicle material.

Cottonwood, yellow poplar and red gum are wagon bed material; the lumber of which wagon boxes are made. The boards come in three lengths, 12, 14 and 16 feet, and are known as wide or narrow. The wide boards are from thirteen to seventeen inches in width, the narrow from nine to twelve. The lumber must be sawed of a size that will dry full one inch in thickness. Wagon box boards are strictly high-class lumber. They must be practically free from defects. In addition to that, they must be of wood that seasons well, stands well after it is seasoned, and which dresses with a smooth surface and possesses good painting qualities. That is a combination not easily found, and of the hundred or more species of wood in the forests of the United States, very few have been found suitable for wagon beds. The National Wagon Manufacturers' Association lists only three, those named above; but, of course, wagon beds are sometimes made of other woods, and occasionally with very good results.

Yellow poplar is highest in price in Illinois, and probably in nearly every other wagon material market in the country. It takes a high price to bring the broad, clear poplar boards to the wagon factory, because such boards are demanded in many other industries and the supply is limited. Poplar's superiority as wagon box boards consists in the wood's lightness and toughness, its small liability to split, warp, check, shrink, and swell, its susceptibility of smooth polish, and its fine showing when painted. It was once used more extensively for wagon beds than at present, because it had not yet reached such a high price.

Cottonwood usually is considered next in rank to yellow poplar as wagon bed material, and more of it is used than of poplar because it is cheaper. It is generally inspected under the same rules as yellow poplar. It finishes nicely, paints well, and wears in a satisfactory manner. Black willow is sometimes substituted for cottonwood as wagon bed material.

Red gum is coming into use for wagon beds, but the quantity is still much below yellow poplar and cottonwood. Some wagon manufacturers say that it has not yet made good, and that its seasoning difficulties have not been wholly overcome. It is said to be hard to work, inclined to split when nails are driven in, and even after the wood is painted it may warp. These are the worst charges filed against it, and they may not hold when the wood is better understood. The rapidity with which it is coming into use for other purposes indicates that it will soon take high rank as wagon bed material.

Longleaf and shortleaf pine listed in the foregoing table form the bottom of wagon beds. The place is not exacting, and many woods answer. The other woods shown in the table fill various places in the manufacture of wagons. Much is built in the tops of business wagons, such as are used by butchers, bakers, fuel companies, milkmen, and contractors on public works use.

Osage orange, sometimes known as bodark, fills a somewhat peculiar place in the wagon industry. It is made into felloes, and the wagons which contain it are sold in the hot, dry, sandy regions of the Southwest, in Texas, Oklahoma, western Kansas, and beyond. The wood is reputed to neither shrink nor swell, and it will stand up in a hot, sandy region better than any other known wood. Wagons so equipped fetch considerably higher prices than those equipped with oak felloes. Osage orange is reputed to be almost proof against decay when set as fence posts or otherwise exposed to weather; yet, it is a peculiar thing, and is apparently well authenticated, that it sometimes decays in a few months if thrown together in a pile, even indoors. It is said that a wagon which is left unused, though under a shed, may lose its Osage orange felloes by decay in one year's time; but the felloes are practically immune to decay if the wagon is kept going.

The manufacturer of wagons procures much of his material through the usual trade channels, but some of it can be had only by special effort. Much of the wagon dimension stock is standard, and is bought and sold in the markets in the common way, but most large manufacturers require some special sizes to meet particular requirements. These are cut to order under contract. The manufacturer anticipates his wants as far in the future as possible. Regular stock is generally bought without much trouble. The purchaser can pick what he needs from various lots offered. Traveling men visit him regularly and take orders for what he needs in their line; but special needs are not usually thus provided for. Lists with specifications may be sent to dealers, or to mills, and some purchases are made in that manner; but few large factories are able to procure in that way all the wagon stock they need. It is necessary for them to send buyers into the field who visit dealers and mills, and place orders to meet particular needs. The mills which cut wagon stock are anxious to sell their product, and the wagon factories are willing to buy, but it is not always easy for the seller to find the most profitable buyer, or for the prospective buyer to locate the stock he wants.

It is a mistake to suppose that wagon stock is the output of large mills only. Some is produced in that way, but much of it is literally gathered up "along the highways and hedges." Small mills, many of which are owned by farmers, turn out some of the best wagon material. The mills may not run more than two or three months in the year, in winter when work on farms is slack. The timber is cut from farmers' woodlots. Perhaps a field or two is being cleared, and trees fit for wagon material are cut into wagon stock; chair dimensions may be made of the leavings, and the scraps are cut into cordwood. Practically everything is saved, but in early years such material was piled in the clearings and burned.

Some of the best oak and hickory wagon stock comes from farmers' woodlots. Much of it may be second growth, therefore of rapid growth, and tough and strong.

Canal's Effect on Character of Shipping

According to the statement of one of the old captains sailing on the Pacific, the opening of the Panama canal will see the resumption of the employment of a large number of sailing vessels operating between Atlantic and Pacific ports. The statement of this seafarer is a complete refutation of the statement that the days of the old "windjammer" are nearing an end.

This captain, whose name is Carlson, states that on his last visit to Newcastle, he counted 120 off-shore sailing vessels in the harbor and that a majority of them were loading coal for the west coast of South America. A few of them were under charter to carry nitrate from the west coast to the United Kingdom. Nearly every week in the year, the sailing skipper declares, the same number of "wind-jammers" may be seen at Newcastle, the skippers there preferring them to steamers. It is also stated that these sailing vessels are operating under higher freight rates than are the steamers.

According to the opinion of the skipper quoted, it will not be long before the shipyards of the world will commence once more to turn out sailing vessels. He believes that large schooners with from four to six masts will be built on the Pacific coast, each having a capacity of from 2,000,000 to 3,000,000 feet of lumber.

This condition, if it materializes, will not only be welcome from a romantic point of view, but should have a marked effect upon the lumber business inasmuch as it would probably result in an increase in the use of wood in vessel construction.

Transportation of Lumber

FOURTH ARTICLE

PERMANENCY IS POSSIBLE

It was once believed that when a tract of timber had been logged it was done for as a producer of trees. Experience during two hundred years seemed to prove that such was the case. History had repeated itself so often in that particular that it was taken for granted that no other result need be expected. When a mill had cut out its "stand" or "set" it was moved away with no expectation of ever returning. The operator had no thought of the future so far as that locality was concerned. The man who expected to make a business of operating sawmills never expected to operate twice on the same site and when he moved on, he never looked back. He had skinned the land and had no further interest in it.

A former article had something to say along this line in recounting the shifting scenes of lumber operations from region to region. It was pointed out that lumber mills have been on the move for a long time—first in New England, then in New York and Pennsylvania, next in the Lake states, finally shifting to the South and to the Pacific coast. A particular region was practically depleted before the center of operations shifted to new fields. At the present time the two great producing regions are the southern states and the Pacific coast. If we are to judge the future by the past those timbered domains will be cut out in course of time. Then what is to happen?

There is no other heavily timbered region to which lumbermen can turn for supplies. It becomes a vital question whether anything can occur to change the course of history—if not, the virtual end of the timber resources of the United States may be looked for at a time which some persons now young may live to see. This is an old story. It is the alarm which has been sounded again and again; and it is as well founded as was the prophetic announcement of the destruction of Jerusalem when the Assyrian armies were already on the march against it.

There is hope, however. Agencies are now at work which will end the destruction of forests and bring about their development. When that has been accomplished it will no longer be necessary for whole regions to be abandoned by lumbermen because there is nothing more to cut. A hint of the new way of handling forest problems is contained in the following paragraph quoted from an article in a recent issue of American Forestry and written by W. B. Greeley of the United States Forest Service:

"A few weeks ago I was on the Sierra National Forest as a member of the marking board of the Forest Service in California. It was our duty to determine the methods of cutting to be used in a large sale of lumber. We chained off strips through one of the magnificent forests of sugar pine, yellow pine, and fir on the headwaters of the San Joaquin river, designating the timber to be cut because of old age or disease and determining what trees should be retained to restock the land after logging and make further growth before harvesting. This was the final step in two years' work on the forest management of a watershed of some 50,000 acres. First a detailed map of the area and estimate of its timber were made. The ripeness of the timber for cutting and the amount which should be removed were ascertained. The engineering features of developing the watershed, the route and cost of seventy-five miles of railroad, the methods and cost of logging, and the market value of the products to be cut were determined. The next step was to work out the business features of exploitation, the prices to be paid for the timber, and the terms of the sale contract. Finally the marking board made its silvicultural study of the various types of forest, chose the methods of cutting and applied them concretely on sample areas. All of this work is now embodied in the clauses of a timber sale contract involving over $1,600,000 worth of government stumpage. Upon it will be based an investment in mills and equipment of nearly $2,000,000, and a lumbering operation cutting 40,000,000 feet annually for twenty-two years.

"Over two years of technical work was necessary before any of these things could be done. But our task on this area has just begun. The results of these studies must be applied in directing cutting and logging through the twenty-two years of the contract which the government has now made. And it will be twice or thrice that time before the aims sought in the broader features of forest management on this watershed can be accomplished.

* * * * *

"The first and greatest technical problem on the forests is to put their timber to use under the scientific methods which insure a permanent yield and the best disposal of the product. Near the central Montana forests a permanent copper mining industry must be supplied. Its demands are large. It has required an intensive inventory of the timber within practicable distance and a determination of the growing capacity of the forests. It has necessitated detailed studies of methods of cutting and reproducing stands of lodgepole pine. The result of this work will be the blocking out of definite areas which will yield perpetually the 30,000,000 feet or more required annually in this industry and the preparation of logging plans for their systematic cutting, unit by unit, over a period of from sixty to one hundred years. On the Whitman National Forest in the Blue mountains of Oregon a plan of exploitation has been developed by several years' work under which four sawmills will soon be cutting from 40,000,000 to 60,000,000 feet annually. Logging units have been mapped out which will supply these mills for at least twenty years. Scientific study of the methods of cutting and reproducing yellow pine was a vital feature of this plan. Here, in the face of a local demand for timber beyond the capacity of the forest to supply, a definite plan of exploitation has been prepared and put into effect which will permit the cutting of the maximum amount of timber annually consistent with maintaining the permanency of the forest and hence of the industries built up upon it.

"These are illustrations of what must be done on hundreds of other units making up the 600,000,000,000 feet of stumpage on the national forests. We must have plans of scientific management covering engineering development, logging methods and costs, the methods of cutting applicable to each type of forest, and the future yield obtainable under them. One by one, these units will thus be reclaimed from unproductive pieces of virgin wilderness and made to yield the maximum amount of forest products through scientific exploitation which they are capable of maintaining permanently. The total annual yield which can thus be produced for all time is roughly estimated at 6,000,000,000 feet. With the right kind of scientific treatment the forests should be made to yield 8,000,000,000 or 9,000,000,000."

The purpose in making surveys and carrying out carefully made plans on that large tract is to provide for the future. Marketable timber only will be cut, young trees will be left to grow, a few old ones will be spared to scatter seeds on vacant spaces, brush will be piled and burned or otherwise disposed of, and fires will be kept out by all known means of protection. The result will be that by the time the last of the 50,000 acre tract is lumbered, the first will be nearly ready to cut again. A new crop will begin to grow as soon as the old stand is cut. Under that plan, there will be no waste and abandoned land. A hundred years from now, or five hundred, it will be growing timber. The railroad built into the region need not be taken up, abandoned or forced to depend upon other tonnage. It can go on carrying lumber to market from that tract. It will be quite different from some railroads built to remove lumber from private holdings and which

have little or nothing to carry after the first onslaught upon the resources of the forest is over.

The instance referred to in California is not the only undertaking of the kind by the Forest Service, to use and at the same time preserve the forest resources. Precisely the same kind of work, and on a very large scale, is being carried out elsewhere. At first it was difficult to induce lumbermen of large means to buy government timber. They feared that the restrictions under which it must be cut—low stump, brush piling, cutting only mature trees, and precautions against fire—would make logging too expensive; but a few practical demonstrations sufficed to prove the fear groundless, and now it is not difficult to find buyers of strong financial backing who are willing to sign long term contracts.

The examples are doing good. If the government can lumber its land, and not destroy its ability to produce succeeding crops of timber, private owners can do the same. When this becomes the rule instead of the rare exception, the lumber business in a region will be as permanent as the agricultural industry.

Nearly side by side with the tract in California which is to be lumbered in the right way is a tract constituting a terrible example of the wrong way of lumbering which has been going on there for twenty years, and which cannot continue much longer, because when land is reduced to a desert, lumbering must cease. The tract in question has been worked in the old way—the way which ruined timber prospects in many another region. It was formerly as fine a piece of mountain land as could be found in California, covered with dense forests of sugar and yellow pine, fir, and cedar. Single trees cut from 4,000 to 25,000 feet, and the tract contained hundreds of millions of feet. Lumbermen went to work on it in the old way, cut, wasted, burned, with no interest in anything except the immediate rakeoff. Nothing was left, and what was a magnificent forest twenty years ago, is now a desert, a mass of rocks so white that winter snow does not change their appearance.

This is cited as an example, not because it is peculiar or unusual, but for the reason that it lies so near the tract now about to be lumbered in the new way, that the full lesson of the contrast may be studied. One piece of forest land has been ruined for all time by wrong methods, the other is entering upon perpetual usefulness by right methods.

Fortunately, there is a tendency to face about in some quarters. Destruction still stalks in the lumber regions, but conservation is gaining a little ground. It is being found out that second and third crops of timber are possible. Massachusetts and Connecticut produce 180,000,000 feet of white pine lumber yearly, and it is all second growth. It is more than the total output of pine in Michigan now, although that state was once the greatest pine producer in the world.

As sources of freight there is little comparison between the tract that is stripped of its timber once for all time, and the tract which is cared for and made to yield perpetual tonnage. The latter is permanent and can be depended upon to produce its share of prosperity; the former is a dead weight on the community where it is situated.

Forest products yield enormous tonnage to transportation companies—not less than 193,000,000 tons yearly according to statistics compiled by the Interstate Commerce Commission. There is no necessity that it ever should be less. There is woodland enough to grow yearly as much as is now being cut, but it will not grow unless methods are changed.

Wood Disappearing in Barber Shops

At the present time an important change is taking place in the manufacture of all barber shop furniture and fixtures, but more particularly in the chairs. It is not so much a change of style as of material. The use of wood seems to be losing ground. This holds more in large cities than in towns and villages, but the tendency is general. It cannot be stated in exact figures just what ground wood has lost in the past two or three years, because few statistics have been collected in a way to bring that point out, but as far as Chicago is concerned, the loss of wood is very noticeable.

The Forest Service investigated the manufacture of barber shop furniture in Illinois, for the year 1909, as far as the use of wood was concerned, and the table which follows gives the result in kinds of wood, quantity, and cost.

Woods Used in the Manufacture of Barber Shop Furniture in Illinois in 1909

Kind of wood—	Feet B. M.	Average cost per 1,000 feet
White oak	740,000	$49.99
Red oak	361,000	46.63
Birch	91,000	20.00
Chestnut	83,000	23.00
Basswood	78,000	14.92
Beech	50,000	20.00
Rock elm	25,000	22.00
Southern pine	24,000	28.00
Yellow poplar	5,000	48.00
Total	1,457,000	$41.99

Statistics have not been collected for a year later than 1909, and figures cannot be quoted to show the increase or decrease in the use of wood for barber shop furniture since that time; but it is the opinion of men in a position to procure reliable information that less wood is used now than was used three or four years ago.

Enameled iron is taking its place This is true especially of barber chairs. A Chicago manufacturer of barber furniture stated recently that it is now almost impossible to sell wooden barber chairs in large cities, and barbers who still have chairs of that kind are getting rid of them at every opportunity. The makers of enameled iron chairs usually accept the second-hand wooden chairs in part payment for new equipment. The wooden furniture is then disposed of to barbers in villages and small towns who do not feel justified in making the investment necessary to equip their shops with expensive enameled furniture. It thus appears that the wooden barber chairs are going out of use.

The reason for it is not found in any objection to wood in the matter of strength and beauty, but the style is changing. Boards of health inspect barber shops pretty rigidly, and white enameled iron is regarded as more sanitary in that particular place. No one claims that it is more handsome than wood, or that the chairs are more comfortable or more durable.

The change to enamel has extended farther than the chairs, in the barber shop equipment; but it is less complete elsewhere. The fixtures are still of wood in many shops where chairs are of enameled iron. The fixtures include the frames of the mirrors, the cabinets of drawers, and the shelves and brackets belonging with the outfit. Along this line the change from wood to metal has been shown. Wood has been satisfactory, and the only argument against it is that it does not harmonize with the white metal chairs. The result is that some shops are making a complete change.

The new installments have not escaped criticism. Many people object to the appearance of the dead white fittings of the barber shop on the ground that the place looks too much like an operating ward of a hospital. It lacks the cheerful warmness of wood, and looks cold and uncanny. The barber shop that banishes its wooden furniture and fixtures may gain a point in the opinion of boards of health and sanitary engineers; but in handsome appear-

ance there is a positive loss. Besides, it is by no means certain that an enameled iron chair will be more sanitary than one of oiled and finished wood; because it is well known that enamel sometimes develops hundreds of small cracks or crazes to the square inch, and each one may become the lurking place for swarms of bacteria. In view of this it is not improbable that a trial of a few years will result in bringing wood into popular favor again as material for barber shop furniture and fixtures.



Subletting the Labor Contract



A student of economics recently declared that the high cost of living is another way of referring to the high cost of labor, since the price of labor starts with the cost of living, as a minimum. It is impossible to get labor for less than it costs the laborer to maintain himself and his family; and the factors which have contributed to increasing the cost of living for the entire country have been brought home graphically and unmistakably to the man who is a purchaser of labor.

He can't help knowing that it costs him more to handle lumber now than it used to, because his books show it. It costs him more to put logs through his mill than it formerly did, chiefly because the men who run the saw and handle the lumber are getting more money than was the case a few years ago. He has been gradually increasing their wages as he found necessary, and the sum total is shown in the analysis of his expenses of operating and in the final statement of the cost per thousand of making and handling lumber.

This inescapable condition only emphasizes, however, the importance of knowing that the money laid out in labor is properly invested; in other words, that the laborer not only gets, but earns, his hire. The slipshod yard foreman, the careless mill superintendent, and the sleepy inspector are all in a position to waste labor; and their inefficiency or indifference will be speedily reflected in heavier labor bills, without any adequate explanation being forthcoming.

One method of solving this problem has been explained in HARDWOOD RECORD previously; that of paying men on piecework and thus putting up to them the question of delivering the goods. That is a fair and satisfactory method of handling the yard question, and has worked out well in many instances, not so much from the standpoint of lowering the cost of the work, which does not always happen, as because of the more rapid movement of the stock through the yard. There are fewer emergencies when the lumber is kept moving in and out at good speed.

A plan which is an adaptation of this idea, and which was recently decided on by the head of a large wholesale hardwood concern, operating two yards in the same city, deserves mention because it is unusual, and at the same time commends itself because of its simplicity and ease of operation. It consists of subletting the labor contract to the yard foreman, so that the dealings of the company are entirely with him. He is paid on the piecework basis, the total amount of lumber handled by his crew during the week determining the sum that he receives; and from this, of course, he pays the inspectors and the members of the crew.

As indicated, the concern using this plan has two yards, and the system has been put into effect at the yard which is not directly under the eye of the lumberman. It is some distance from the office of the company, and is used for a special purpose, which will be explained later. But while it was being operated on the day wage system, the lumberman found that the cost of handling stock was apparently out of reason, one excuse after another being given, but none of them seeming satisfactory. He came to the conclusion that his own presence at the yard adjoining the office, where he was able to look after things and direct the movements of his men so as to avoid wasted time between jobs—which, by the way, is a most prolific source of increased expense—was responsible for the lower cost of handling lumber shown there.

In order to stimulate the other force, he conceived the plan of putting them simply on a straight piecework system; and then the idea occurred to him of putting it up entirely to the yard foreman to get the work done, and done right.

"My plan has always been," he said, in explaining the proposition, "to appoint men to do certain work and then hold them responsible. I look to the superintendents of my mills for results, and to the foreman in each yard for economical handling of my lumber. In this way I avoid alibis, and insure getting results or knowing the reason why if I do not. In planning to relieve myself of all worry regarding the handling of lumber in the more distant of my two yards, I simply carried out my general policy to a little further extent.

"I figured what the average cost of handling lumber in that yard had been, including the wages of the crews, the salaries of inspectors and that of the yard foreman. I was convinced that the work could be done for less, and fixed a price per thousand that was somewhat less than had been expended previously, and was about what it cost to handle it at the other yard. Then I told the yard foreman that I was going to pay him for the work done at the yard, and that his men would get their pay from him. I suggested a scale of piecework for them that would allow him a pretty big slice of the total, and also indicated that it would be a good plan to allow the better men something in the way of a bonus to stimulate their work.

"He jumped at the chance of making more money than he had done before, and explained the new plan to his crew. He told them he thought they would all make more money than they had done before, but that they would have to step lively. Well, step lively they did. Even the inspectors, who had been working slow and easy, being pretty far away from the office, and entirely out of sight of the heads of the concern, found that they had to ginger up, because the crews wouldn't let them loaf. They simply had to work fast.

"Under that plan no special hours of work have been arranged, of course, and the result is that the men get there early and work until they have accomplished a good day's total. They usually quit fairly early in the afternoon, which gives them a chance to rest up and return in good condition the following morning. I don't have to worry about the labor end of the business, and the yard foreman is perfectly willing to take the worry off my hands. He is now making about $30 a week, and earning every cent, because he is putting in all kinds of extra time, and simply delights in piling up the work a little faster than he did the day before."

This system also has a few minor advantages such as relieving the office of bookkeeping. The yard foreman keeps his own accounts as to the work done by the men in his crew, and the tallies of the inspectors of lumber unloaded and loaded out check up the account that he handles. He is paid the full amount, and pays off the men under him.

It is a good deal like the plan used by coal dealers of having coal delivered by teaming companies. They know just what it is costing them to make deliveries, whereas they never do when they are doing their own hauling. The lumberman referred to has reached the position where rain doesn't worry him, because if lumber isn't being handled he isn't losing anything. At the same time the men are doing enough work to be able to lose the time due to interruptions from bad weather without suffering.

The special purpose which the yard where this plan is in vogue is used for is the handling of green lumber. It has to be put on sticks, of course, and is a slower operation than when it is simply bulked down. All of the dry stock, which does not need to be put on sticks, is unloaded at the other yard. The advantage of having the sticking work done by a crew trained to this kind of work, and handling nothing else, is apparent, especially to the man who has had trouble

getting his stacks of green lumber piled right. When the two classes of work are entirely separated, and one crew is doing one kind of handling and the other another kind, the opportunity to develop speed and accuracy in each direction is greatly increased. The difference in the time and labor required in handling green lumber as compared to dry is taken into account in figuring the price which should be paid for the service.

Speaking of labor expense suggests the advisability of as careful an analysis of the labor cost of each operation as possible, not only in the rehandling yard but in the sawmill. When the day wage system is used, the books do not show the cost of performing any particular operation, but simply group the entire expense of handling lumber together. In case the cost rises, it is next to impossible to determine where the fault lies, without changing the system used in tabulating labor costs.

Mills which want to keep exact track of their expenses, and don't care to take chances in this respect, separate the labor cost into various items. A typical statement exhibited by a lumberman who has one of the largest hardwood mills in the South showed the cost of labor for the following operations: Unloading logs and delivering to mill; sawing, trucking to the yard from the mill slip; stacking; inspecting; taking down and trucking to cars.

If the expense of putting lumber through this plant jumps up a few notches, the head of the mill can find out, without much difficulty, what caused it, and just where the increase is. It is a little more work to separate the labor costs in this way, but it is worth while.

Hardwood Yard Machinery

Are the hardwood yards overlooking some opportunities in connection with the use of portable machinery for ripping and cross-cutting at the yards, or to what extent do the average hardwood wholesale yards use such machinery advantageously?

This question was brought forcibly to the writer's mind recently by the sight of men using buck saws in a hardwood yard to trim off boards to improve the grade. It was quite a lively assembling yard of a well-to-do, progressive hardwood concern, the yard presented a busy appearance. A number of cars were being unloaded, and on the loading dock was a buck saw and a low trestle or two. From time to time the inspector receiving the lumber would mark a board to be cut. Sometimes it was only a foot off; other times two feet, three feet, or four feet, but perhaps the average would be two feet. No tally was kept to see just how many boards were cut with the buck saw in the course of a day, but it was noticed that it was called into use quite frequently at the receiving end. Meantime the shipping end perhaps called for both cross-cutting and rip-sawing or at least cross-cutting, while rip-sawing would have helped out a great deal.

The purpose here is not to criticise the management of this yard for using the buck saw, but to raise the question of the possibilities of portable power driven saws for yard use. Evidently the buck saws were worth while or they would not have been used. It improved the grade of the lumber and made it worth more, but the question is would it not have been practical to get more and better service by the use of some portable power driven saw rig?

There is a multitude of offerings in the way of portable sawing and woodworking machines both for yard and shop use. Many of the retail lumber yards have long been using them to advantage in their business. By means of these power-driven machines they are able not only to cross-cut lumber to length, but also, and what is of more importance, they have been able to rip stock and reduce it to dimensions so that they can give more satisfactory service with even a smaller assortment of lumber. Moreover, the economics of the saw rig are such as to make it desirable for that purpose alone. In addition to retail yard men, building contractors are using many of these machines and getting results from them.

In the hardwood yards conditions are different, of course, from those in the retail yard, but just the same there may be fully as much need for portable machines. They would not only make easier trimming of lumber to shorter length to improve the grade, but it would be much easier to reduce lumber to specific dimensions and to edge off some boards, to rip some and to put up shipments exactly as wanted in a more satisfactory manner than by sorting through a lot of piles to get just what is wanted. It should be possible also to improve the grade here and there by ripping as well as cross-cutting and to generally reduce stock to just the dimension wanted. Then the rippings, cross-cuttings and culls might be worked up on the same machine into salable dimension stock and enough realized from this alone to pay the original cost and expense of operating the machine.

Portable machines are to be had in many sizes, shapes and combinations and at various prices ranging from about $50 up to nearly $500. There are plain table saws, there are table saws with a gasoline engine mounted underneath to furnish power, and there are table saws with electric motor drives mounted in the frames; and then there are various other combinations including top smoother planing machines and special appliances for woodworking. Out of the entire lot of offerings any man should be able to get anything he thinks he may need in the way of portable power machinery to be driven by electricity or with a light gasoline engine.

Refund Freight Cases in Arkansas

Two railroads in Arkansas have been ordered by the Supreme Court of the United States to refund a certain part of freight charges collected between Sept. 3, 1908, and July 19, 1913. The roads are the Iron Mountain and the Cotton Belt. The matter has been in court a long time, and the court's ruling has finally settled it as far as the railroads are concerned.

Nearly six years ago the Arkansas Railroad Commission ordered the railroads of the state to put into effect a tariff schedule that reduced the rates then in force in the state, but not outside of it. The Cotton Belt and the Iron Mountain roads appealed, and while the appeal was pending, they continued to charge the old rate, but it was with the proviso that they would refund the difference between the old rate and the new, if the case finally went against them.

The case was a long time in getting through the court of last resort, but when the decision was finally handed down, it upheld the rate as fixed by the Arkansas Railroad Commission, and the railroads must refund large sums collected from shippers of freight.

Judge J. G. Wallace has been appointed as special master. All claims must be filed with him at his office in Little Rock before the first day of November, 1913.

The total sum to be refunded is large and the claimants are many. Lumbermen are among the largest claim holders. Disputes have already taken place as to who should receive the refund. These disputes are between the shippers and the buyers of lumber. The former hold the original freight bills in most instances; but the buyers insist that they actually paid the freight, since it was included in the price of the lumber they bought. No decision or ruling has yet been made in the matter, but the special master is getting all claims in shape to present for payment.

The other railroads doing business in Arkansas are not included in the present proceedings, but their case will be attended to later.

Swarms of claims agents have appeared in Arkansas and are importuning all persons having claims. They want to act as agents in collecting the claims. Some of the trade associations have advised their members to have no dealings with the agents, and the railroads have announced that they will transact no business with them, but prefer to deal direct with the claimants themselves or with the association officers.

About Mechanical Salesmanship

The lumber business is probably one of the most exacting in the world from the standpoint of the requirement of versatility and adaptability. Conditions regarding the manufacture and use of lumber, especially in the hardwood field, are changing so rapidly that the chap who hasn't his ear to the ground and is not ready to change his position to meet the new trade alignment is likely, to change the metaphor a trifle, to be left at the post.

The strange thing about it, too, is that the sawmill man who is the most versatile when it comes to the handling of logs and the manufacture of lumber, is frequently the most mechanical in the sales end of the business. There is no problem too difficult for him, if it deals with logging a tract in the back-woods, getting the most out of a bunch of defective logs or speeding up a mill crew; but he loses out badly when it comes to getting the money out of his product.

Arthur Sheldon has said a number of good things, his best contributions being not so much in the way of new principles or a new philosophy—although some of his devotees would have one think so—as in coining new and apt definitions of business phrases. For instance, he illumined a spot that has been rather dusky in the minds of most people when he pointed out that everybody is a salesman. The result of all endeavors, he has made plain, depends upon the selling ability of the individual; and insofar as he has fallen down at that, he has failed at his chief work, no matter what it is.

With this in mind, it is plain that the lumberman who is a success from a manufacturing standpoint and is regarded by his acquaintances as a wonder in handling the mill end of his business, and yet is not able to cope with the sales problems that arise, is in truth and in deed only partly successful; and by the same token he may be laid down as a partial failure. The chief reason for this result is the use of mechanical methods in selling which would not be tolerated for a moment in manufacturing. It is of course true that failure to keep moving, mentally, at the sales and distribution end of the business reacts on the manufacturing department as well. For example, a certain mill had been cutting inch plain oak as its staple. It had become so used to cutting it up that way that if anybody had suggested departing from the rule he would have been accused of lese majeste or something equally as bad. However, one fine day a lot of logs which had just been purchased were found to have become infested with worms while lying in the woods awaiting shipment. The superintendent went straight ahead, however, sawing the logs into inch boards, though bemoaning the fact that the lumberman was going to get such poor stock out of his high-priced timber.

About that time the owner of the business came along. He heard of the situation and promptly ordered operations discontinued, as far as cutting up the wormy logs was concerned. Then he got busy with some of the purchasing offices of railroads with which he had had dealings, found that they were in the market for a lot of bill oak for construction work and got their specifications. He put in a price which he knew would land the order, and as worm-holes were not a defect in oak used for that purpose, he was able to cut up the stock to advantage in making the bill stuff, as well as furnishing the mill with a lot of work which was comparatively simple and required little expense for labor and power.

That showed versatility. The manufacturer was able to change his battle-line when the necessity arose. He believed in making inch plain regularly because that was the most easily salable item he knew of, and he did not believe in tying up a big investment in lumber that was available for the market only semi-occasionally. But this set rule did not prevent him from about-facing and getting into some other class of work as soon as the need became apparent.

In the same way a good many lumbermen are falling down because they have not been watching the change in the situation as far as consumption of their products is concerned. It is good business for the millman to sell his output through the jobber; but the wise manufacturer never stops at that point mentally. He may do so in practise, but he follows his lumber through to the consuming factory, so that he knows all the time what is happening to it. This is not meant literally, of course; but the point is that the manufacturer should not lose sight of the fact that he must keep posted on consuming conditions, even though he is not selling the consuming trade directly. Failure to do this has been costly to a good many concerns operating sawmills. A lumberman confessed recently that it took him several years to discover what had happened to panel poplar following the slump in the demand for this material from the automobile manufacturers. He had kept on piling it up, of course, and when the demand left he was literally stranded.

This is a rather extreme example, but it will show the necessity of keeping informed on every branch of the business, no matter whether one's immediate dealings are with that branch or not. That is one of the greatest advantages of trade journals. They are in a position to pick up facts which, read with judgment and imagination, point to important conclusions in many cases. A wise lumber dealer, who has been letting his trade journals pile up on his desk in their wrappers for a long while, recently overlooked a bet through failure to observe a certain item recorded in most of the leading journals. He discovered his error later, and now intends to profit by it.

"Hereafter I shall take the trade papers home at night and read them there if I can't get time at the office," he said. "I have to get all the available information about my business in order to keep from being overtaken by some circumstance that I could have avoided. The trade journals contain so much suggestive matter, both in the news and special articles, that I am going to make a point of assimilating as much of it as I can readily digest."

And it is safe to say that this lumberman will not be in danger of attempting sales work too mechanically. The sort of business man who is taking in information from every direction, as he is doing, is bound to anticipate any sharp or radical change in the situation and be prepared for it, instead of overwhelmed by it.

A good deal has been made of the substitution situation, of the loss of business by the lumber trade to other industries. While this is serious, it is not so important to the individual lumberman as the substitution of one wood for another in the wood-using industries. There is more of this going on than there is of wood-users turning to other kinds of material altogether. It is a good deal simpler for the consuming manufacturer with a line of wood-working equipment to change woods than it is to put in an entirely new type of machinery or erect a new factory; and hence the effort to improve conditions, cheapen production and meet the popular demand is being carried out more through changing the kind of wood used than in changing from wood to steel or some baser material.

The lumberman who handles his selling work mechanically doesn't realize this, however, and keeps making the same old stock, in the same old dimension, letting it pile up on his yard until someone comes along and takes it off his hands at a bargain figure. He doesn't realize that the car builders, the interior finish manufacturers, the planing-mill men, the box manufacturers and in fact every interest which is using wood are studying the field, going over the possibilities and testing the qualities of every wood suited to their purposes. He doesn't learn of it when the car manufacturers begin substituting chestnut and ash for oak; when the refrigerator concerns use chestnut instead of ash in manufacturing their product; when the box men provide gum for cottonwood or poplar; when the planing-mills try out cypress in place of poplar. He has to wait until the falling off in the demand from this or that quarter of the market convinces him, after a long period of useless waiting, that the consumption has been reduced. He is like the fisherman who must cast and leave his bait in one spot for a long while before he knows that the fish are no longer there; when by asking the right people he could have found out at the beginning.

Conservation of time, material, labor and of course money is being accomplished everywhere by the use of intelligent methods. In the

lumber business this movement will be carried on to best advantage by conserving the effort which is now wasted in turning out stock for which the demand has waned. The wise lumberman, intelligently scanning the business horizon, will adapt his products to the market, and not attempt to batter down a stone wall of prejudice by trying to force the market to accept his products as he has made them. The first plan calls for investigation, analysis and thought; the other is the result of mechanical, stolid methods which are the survival of the stone age of business, and have no place in the conduct of a twentieth century lumber enterprise. G. D. C., Jr.



The Manufacture of Canoes



The modern canvas-covered canoe is primarily a pleasure boat, though considerable numbers are built for business. It is a light, cheap, convenient article, and few things made chiefly of wood contribute more to the health and happiness of the people. It is exclusively for out-of-door use, and it tempts people into the open air who otherwise would seldom take an outing.

A recent report on boat building in Maine gives some interesting details of the manufacture of canvas-covered canoes in that state. It is a development from the birch-bark canoe, which was an Indian invention antedating history in this country. The modern canoe is of practically the same form and its method of construction is much the same, though machinery now performs most of the work which the Indian did with his hands, and canvas has taken the place of the birch bark which the savage was forced to use because he had nothing better.

Northern white cedar or arborvitae is employed almost exclusively for the canoe ribs. This was the wood used by the Indians. They preferred it because it was about the only wood which they could manipulate with their crude tools. By beating and hammering with stone mauls, the billets of wood parted in thin laths just right for ribs, which the Indian could easily bend to the desired form. The modern manufacturer prefers the same cedar, not because it is easily worked, but because it is very light and is sufficiently strong for service. It is one of the lightest woods of this country, and is cheap and abundant.

This cedar makes excellent boards for planking, and it is so tough that the boards may be very thin and yet strong enough to meet every requirement of the canoe maker. Unfortunately, the white cedar is poor sawlog material. Trunks are small, usually not straight, often hollow, liable to windshake, and the sawmill turns out few boards of a quality fit for canoe planking. A quite satisfactory substitute has been found in a tree which grows on the northern Pacific coast, in Oregon and Washington, and is known as western red cedar, shingle cedar, and giant arborvitae. Faultless canoe planking is sawed from this wood, and eastern canoe makers are now using considerable quantities of it. The southern white cedar, which is entirely distinct from the northern cedar, and grows near the coast from New Jersey southward, is light enough for canoe planking, but is said to be too brittle.

The gunwales are made of clear red spruce which grows in New England, but much of the best now comes from West Virginia. Different woods are used for gunwales, and mahogany is not uncommon. It is heavy, but it looks well and wears a long time. In Maine the thwarts are of yellow birch, or sometimes of sugar maple; and these woods, together with white ash, are made into seats. Paddles are generally of spruce, but some prefer hard maple which is a little stronger but is less elastic.

Northern white cedar stock comes to the factory in pieces somewhat larger than the rib. They are sawed to size and shape, steamed, bent to the desired form on a wooden mold or pattern, fastened, and left for twenty-four hours.

While on this mold the gunwales are put in, most of the planking is nailed on, and the ends of the ribs sawed off. The half-made canoe is then taken from the mold, the planking is finished, and the thwarts and deck are put in. Then comes one of the most important parts of the whole operation. The canoe is soaked in linseed oil for twenty-four hours, and every inch of wood in it is thoroughly saturated, and becomes practically immune to the influences of water.

The next step in the process is the stretching and fastening of the canvas. An interesting detail at this point is the removal of the fuzz from the canvas by means of a gasoline lamp. After the surface has been singed to prevent the fuzz from protruding through the varnish, a coat of filler is applied to the canvas, and the canoe is put out of doors, bottom side up, and it remains three or four weeks to permit the filler to harden. A second coat of filler is then applied and the canoe goes out of doors again for several days. This second coat of filler is carefully smoothed down by the workman's hand. No brush has been invented that will do as good work as the bare hand. The next step is a coat of paint to give the desired color, and finally a finish of spar varnish is given both the inside and outside of the canoe.

There are various styles and patterns of canoes. Some are designed for use on lagoons and ponds in city parks. Some are for pleasure journeys on lakes and rivers. Others are intended for the serious work of travelers and explorers in remote regions. Extra long and large canoes are made for parties, such as boat clubs and boy scouts.

The service which a good canoe will give is remarkable. Announcement was recently made that a United States officer had been ordered to proceed in a canoe from the source to the mouth of the Mississippi, a distance, following the bends of the stream, of about 2,500 miles. That will be an easy trip, however, compared with some which the canoe goes through safely. It is not unusual for explorers to carry their canoes long distances over very rough country, passing from one river or one lake to another. A good account of such service by a canoe is found in Dillon Wallace's book "The Lure of the Labrador Wild."

Canoes large enough to carry three or four persons with neces sary baggage are sufficiently light to be carried by one man. The old style wooden boat of equal capacity could scarcely be carried by its whole crew.

Manufactured Exports Ten Times Farm Products

Manufactured goods exported from the United States have increased in the last thirty-three years more than ten times as rapidly as the agricultural exports, as shown by figures collated by the Bureau of Foreign and Domestic Commerce. Farm product exports have not decreased in value, but the manufactures have grown so much more rapidly that the increase is as ten to nine.

From the year 1880 to 1913 agricultural products sent abroad grew in value from $694,000,000 to $1,200,000,000, an increase of seventy per cent. Manufactured products exported in 1880 were valued at $122,000,000, in 1913 at $1,200,000,000, an increase of more than eight hundred per cent.

What is claimed to be the largest one-piece flagpole in the world is to be erected on the grounds of the provincial courthouse in Vancouver, British Columbia. The pole is a British Columbia fir, 205 feet in length, weighing approximately five tons after being dressed and allowed to season from six to eight months. It will be set in a foundation of concrete ten feet deep, giving it a height of 195 feet above the ground after being placed in position.

The Trend of Car Construction

HARDWOOD RECORD has made every effort on various occasions to set forth the lumbermen's side of the question involving the replacement of wooden passenger, mail and express cars with steel cars of that character. While it has been recognized that the old type of all-wooden car is not adapted to the modern methods of passenger transportation, it set forth in lucid and convincing arguments, which arguments have all been accompanied by fitting illustrations, proof that the modernly constructed car of the steel under-frame and wooden super-structure type offers the greatest advantages, including safety and comfort to the traveling public.

Briefly summarizing these arguments it has been suggested that in order to make a car of all-steel construction strong enough to withstand the shock resulting from the average collision, it would be necessary to have such a ponderous and clumsy affair as to make it impossible of construction with any economy of transportation. It has been proven that the type of all-steel car as now constructed will not stand the shock resulting from such wrecks, and that following a wreck of a serious nature, the injured or imprisoned passenger is in a much more precarious situation than if he were imprisoned in a wooden coach. The reason for this is that a passenger wedged in a steel car has absolutely no chance of escape, because, in the first place, all windows are immediately wedged so that it is impossible to open them, and in the second place it is impossible to cut through either from the inside or the outside the steel plates which form the sides and roof of the so-called modernly constructed steel passenger coach.

Formerly there was seen in the wooden cars a glass-covered case containing an axe, a saw and a bucket, which indicated that the passenger had an opportunity of cutting his way out of a dangerous wreck. The fact that these implements are omitted from the all-steel car of present construction is an admission that the entombed passenger has absolutely no chance of escape, and therefore there is no use of making the effort.

Reprints of these articles and the articles as appearing in HARDWOOD RECORD itself have been given wide publicity throughout the country, and have been commented on by the leading officials of most of the large railroad systems in the United States. Almost without exception the opinions of these officials has been that the all-steel car did not offer advantages over the car with the steel under-frame and wooden super-structure, but that, on the other hand, they favored the latter structure, but were forced mainly by public opinion to adopt the all-steel car.

HARDWOOD RECORD, as stated, has made every effort to combat the growing demand for all-steel passenger car construction, and still stands ready to exert itself to the utmost to still further advocate the modernly constructed car with the wooden superstructure over a steel under-frame. In spite of all efforts, however, which have been made through this medium and other sources, the steel car with the sides and roof of steel sheeting has made great inroads on the former type with the steel underframe and wooden super-structure. In fact, the issue has now become a political one. The interests fathering the effort to secure the use of steel throughout in car construction have succeeded in stirring up sufficient interest in Washington to result in the introduction of various bills, which, if passed, would absolutely eliminate wood from car construction.

As stated, the railroads themselves have gone on record, through their letters to HARDWOOD RECORD, to the effect that they did not desire the all-steel constructed car, and they have gone on record in other ways as opposed to its adoption throughout the country. They have urged emphaticaly, says the American Railway Association, an organization representing them in legal and statistical matters, that that association do its utmost to prevent the passage of the pending bills in Congress which would make it necessary to change over the entire passenger equipment of all the railroads throughout the country, and yet in the face of this we have the spectacle of the railroads yielding to the importunities of their advertising departments to the extent of going headlong into the construction of all-steel cars, merely, as far as any evidence shows, because they find it necessary to advertise all-steel car equipment in order to catch the traveler's eye.

It would seem that the best method in the beginning, and a method which would have saved the railroads millions of dollars in more expensive and additional equipment, and millions of dollars in extra cost of hauling the heavy steel construction, not considering the additional wear on the roadbed and damages resulting from the increased number of wrecks, would have been to have organized a comprehensive campaign of education for the purpose of convincing the public that the all-steel car was more or less in the nature of a fad, and that it really did not offer any advantages over the modernly constructed wooden super-structure with steel under-frame, and that the latter type was by far the preferable of the two. However, the railroads preferred to adopt the other policy and in the face of their desire to abate the legislation compelling the adoption of the all-steel cars have gone ahead advertising it, therefore making it almost impossible to successfully cambat the bills now pending.

The American Railway Association, in connection with its efforts to hold back legislation of this character, has compiled interesting statistics showing the advantages in the types of passenger car construction.

On the 247 railroads in the United States there were in service on December 31, 1912, 7,271 steel passenger cars; 3,296 steel underframe and wooden super-structure passenger cars and 46,926 wooden cars. There were under construction on the same day 1,405 allsteel cars; 190 steel under-frame with wood super-structures, and 54 wooden cars. There were acquired in the calendar year of 1912, 1,829 steel cars; 555 steel under-frame with wooden superstructure cars, and 276 wooden cars.

In 1911 the respective figures were: 2,214, 763, 779. In 1910 the figures were: 2,016, 538 and 1,084. In 1909 they were: 488, 425 and 967. Thus it can be seen that, allowing for the natural increase in the total number of cars demanded, the type of construction has swung from a preponderance of wooden cars to a vastly greater preponderance of all-steel cars.

The demand for cars with steel under-frame and wooden superstructure seems to have been maintained rather uniformly up to 1912, when a large number of the cars of this type of construction were changed over to the all-steel cars, and in addition the demand for the wooden car fell off to a practically negligible figure. Of course, in the year 1912 the figures were necessarily smaller in all lines because of the retrenchment policy followed by the majority of the railroads of the country.

It is exceedingly interesting to compare the figures for the United States with similar figures for Canada. On December 31, 1912, there were in service in Canada: 1 steel passenger car, 14 steel under-frame and wooden super-structure passenger cars, 4,876 wooden cars. There were under construction or contracted for on that same day in Canada, no steel cars, 71 steel under-frame and wooden super-structure cars and 446 wooden cars. In 1912 the corresponding figures were: 1, 6, 533. In 1911, 1910 and 1909 there were no steel or steel under-frame cars acquired, and the purchases of wooden cars were: 231, 178 and 121 for the respective years. These figures, together with the figures for the United States, offer material for mature reflection on the part of the transportation companies and the lumber trade of the United States. In this connection it is interesting to note just what is meant by the various types of construction and to note further the progress in the so-called modern type of steel construction.

To begin with, the demand for the all-steel car construction began with the completion of the Pennsylvania railroad tunnel under the Hudson river. There was a public demand which absolutely necessitated the entire elimination of any article of wood in the tunnel itself. With the completion of these steel tunnel

cars, to which the passengers were originally required to transfer from the wooden cars, the Pennsylvania Company conceived the possible advertising value to be derived from the use of all-steel car construction on its suburban trains. It pushed this class of construction and gave it the broadest kind of publicity, with the result that the demand was soon apparent for steel construction in its Pullman and through-car service. The natural consequence was that competing railroads were forced to immediately adopt the same steel construction, with the result that they were obliged to spend millions and millions of dollars for this type of car. Originally the steel car was but sheets of steel, cold and forbidding and uncomfortable in the wintertime, and hot and poorly ventilated in the summertime. It offered nothing pleasant for the eye to look upon, and was but a box in which the passenger was conveyed as rapidly as possible from one point to another without any pretense of breaking the monotony of the journey with attractively designed and constructed interiors.

The railroads have seemingly admitted that the all-steel car is here to stay, and they have recently made efforts to make this type of construction more attractive to the traveler. The fact that they are doing so is attested to by the statement emanating from the offices of the Pullman Company to the effect that the past year has marked a record in the demand for fancy woods entering into interior construction for Pullman coaches. This statement would appear anomalous without some explanation. The explanation is seen in the fact that practically all of the so-called all-steel cars are now equipped throughout with handsome interior linings of such fancy woods as mahogany, English oak, etc. This has led to an actual increase in the demand for these woods for interior Pullman car construction over any figures yet recorded. Thus it is seen that the so-called all-steel car is really not an all-steel car at all, and that the figures offered by the American Railway Association are not absolutely authentic in this particular, so that the lumber trade should not be unusually discouraged when it reads these statistics.

As a matter of fact, wooden cars, as considered by the railroad officials, are those built entirely of wood with the necessary steel and iron parts; steel underframe cars are those with steel underframes and entire wooden super-structures, including sides, etc.; all-steel cars include all cars not included in the two above groups. The last type includes cars with a steel under-frame and a steel super-structure made of sheets of steel riveted together and either painted on the inside or finished in imitation of some of the cabinet woods otherwise used. It also includes steel cars constructed in this way but finished on the interior throughout, including panels, etc., with mahogany, English oak and other kinds of handsome interior wood. The latter type of car, however, is not considered in making up the statistics above shown or in compiling the condensed statistics following:

	ACQUIRED			
	Total Number	Steel Per Ct.	Steel Under-Frame Per Ct.	Wood Per Ct.
1905	1,880	26.0	22.6	51.4
1910	3,648	55.4	14.8	29.8
1911	3,756	59.0	20.3	20.7
1912	2,660	68.7	20.9	10.4
January, 1913 (under construction)	1,649	85.2	11.5	3.3

A circular letter was sent out by the American Railway Association to all the railroad companies operating in the United States, and to eleven railroad companies operating 24,718 miles of railroad in Canada. The following is an approximation of part of the information resulting from this circular letter:

	Steel	Steel Under Frame
January 1, 1909	629	673
January 1, 1910	1,117	1,098
January 1, 1911	3,133	1,636
January 1, 1912	5,347	2,399
January 1, 1913	7,271	3,296
Increase 1913 over 1909	6,642	2,623
Per cent increase 1913 over 1909	1,055	389

In addition, between January 1, 1913, and July 1, 1913, orders have been placed by railroads for 1,140 passenger vehicles, of which would indicate that the construction of wooden passenger ing the cars with the wooden interior, and 76 or 6.7 per cent with the steel under-frame. No orders were placed for all wood cars, which would indicate that the construction of wooden passenger cars has practically ceased.

It is encouraging to note that so far there has been no united or organized effort to prevent the country-wide adoption of the all-steel railroad equipment with the exception of the successful efforts made by the railway mail clerks which, on August 24, 1912, resulted in the passage of a bill making appropriations for the service of postoffice department for the fiscal year ending 1912.

Under this act and the act approved August 4, 1911, the law on the subject of steel under-frame and steel super-structures states: "That after the first of July, 1911, no payment shall be allowed on full wooden railway postoffice cars unless constructed in accordance with the most approved plans and specifications of the postoffice department for such type of car, nor have any full wooden railway postoffice car run in any train between adjoining steel cars, or between the engine and a steel car adjoining, and that hereafter additional cars accepted for this service shall be of steel, or with steel under-frame if used in a train in which the majority of cars are of like construction.

It is provided further that after the first of July, 1917, the postmaster-general shall not approve or be allowed to use or pay for any full railway postoffice car not constructed of steel or steel under frame, or equally indestructible material, and that not less than twenty-five per cent of the railway postoffice cars of the railway company not conforming with the provisions of this act shall be replaced with cars constructed with steel annually after June, 1913, and all cars accepted for this service and contracted for by the railway company after the passage of this act shall be constructed of steel.

Thus it is seen that one organization has effected the elimination of wood from car construction, and judging from the policy evidently being pursued by the railroads, the steel car with the wooden lining is now an assured and permanent fact.

Four bills are pending in Congress requiring the replacement of wooden passenger equipment with steel. The period suggested in which this is to be done varies from January 1, 1915, to January 1, 1918.

It does not necessarily follow that the construction of steel passenger cars will be compelled by legislative enactment. If such condition does come about it will probably be based on the policy of the railroads themselves, but it behooves those interested, supplying the railroad construction companies and the railroads building their own cars, to make every effort to prevent the enactment of such legislation, and to effect the minds of those placing orders and making car statistics to the extent that wood will, as formerly, continue to be an important factor in railroad passenger car construction.

The above figures, which, it is believed, are authentic, surely bring the question to an issue in that they give concrete evidence of the startling progress made by all-steel car construction. If some satisfaction can be seen in the fact that there is actually an increased consumption of wood for car interiors, this fact should not so allay the fears of lumbermen that they will not make due effort with the hope of securing for the lumber industry the continuance of this market, which in the past has offered such a broad field for the consumption of their product.

Makers of and dealers in pianos and other fine veneered products are now doing some good boosting for veneered work. The general policy today is to point to the laminated and veneered article as something superior instead of fighting shy of the subject as was often the case in the past.

Press Comments on Forest Trees

Following are recited a few press comments on the magnificent new, de luxe, seven-hundred page illustrated work entitled, "American Forest Trees," by H. H. Gibson, editor of HARDWOOD RECORD, edited by Hu Maxwell, the wood utilization expert:

After a quarter of a century in the making, H. H. Gibson, editor of HARDWOOD RECORD, Chicago, has published his book, "American Forest Trees." It deals comprehensively with one thousand one hundred and seventy-two distinct types of trees found in the forests of this country, and is a publication worthy of the great industry served so long and faithfully by Mr. Gibson. Assisting the author of this important work, was Hu Maxwell, the wood utilization expert. The book contains seven hundred and eight pages, is typographically perfect; comes in a full cloth and leather binding that assures it a place of prominence in the most carefully selected library. Mr. Gibson's effort is more a labor of love than one of financial reward. Had he "been out for the money" he could have rushed it through in a few months or years, put it in its present attractive binding and offered it for sale with a great blare of commercial trumpets. As it is, he and Mr. Maxwell have worked slowly, thoroughly and conscientiously for nearly a quarter of a century, and, to a man of Mr. Gibson's characteristics, the reward of work well done is more satisfying.—PACIFIC LUMBER TRADE JOURNAL, Seattle, Wash.

"American Forest Trees," by Henry H. Gibson, edited by Hu Maxwell and published by HARDWOOD RECORD of Chicago, deserves a serious review.

It is a contribution to tree literature, flung off by these two writers as a sort of a matinee performance or by-product of their busy lives, which, it is easy to understand, would have consumed in the making several generations of time had the government at Washington been doing the job.

Seriously now, the book should really be in the possession of every lumberman who owns a library in these United States. The book is illustrated from photographs made of every species of trade known by botanists to exist within the confines of North America.

Mr. Gibson's pictures of the trees are printed in a sepia tint and Messrs. Gibson's and Maxwell's illustrative text about these trees is "high-brow" enough to be scientific and "red schoolhouse" enough to be fully understood by any American citizen who knows a tree from a tad-pole.

Get this book, Mr. Reader. It is about the best thing we have yet seen "Through Our Wide East Windows."—LUMBER WORLD REVIEW, Chicago.

In our November, 1912, issue we gave preliminary notice of a book to be published by HARDWOOD RECORD of Chicago, Ill. The book has now been issued and stands as a monument to the labors, knowledge of our native trees, experience and travel of the author, Henry H. Gibson. The book gives a very complete description of American trees, their habitats, peculiarities and uses, and is illustrated from photographs taken by the author. The price is $6.00 postpaid.—THE WOOD WORKER, Indianapolis.

The above is the title of a book which has just reached us. The author is H. H. Gibson, editor of HARDWOOD RECORD, Chicago, the work being edited by Hu Maxwell, the wood utilization expert. It is a very instructive and interesting publication, and contains illustrations of the large number of American forest trees treated of in the work. In speaking of the work Mr. Gibson says: "The matter contained in this work has taken up considerable time of both the author and editor for more than a quarter of a century, and as you will conceive, is issued more as a labor of love than with any expectation that it will constitute a source of profit.

"We believe that the work is accurate and of such a practical nature that it will answer every question worth asking concerning any type of American forest tree growth, or the resultant lumber product."

The price of the edition is six dollars net, prepaid.—NEW YORK LUMBER TRADE JOURNAL.

In compiling and publishing the book with the above title, Henry H. Gibson, has given to the lumber trade and to all others interested in the subject a most valuable reference work. All of the large amount of material in the book has appeared in the regular issues of the HARDWOOD RECORD, and it was undoubtedly the interest aroused by these various articles which prompted Mr. Gibson to gather them under one cover.

The volume includes illustrations and descriptive matter of all of the species described in the series of articles referred to, with a large number of less important trees added. Every region of the country is represented, no valuable tree is omitted, and the lists and descriptions are as complete as they can be made in the limited space of a single volume. While the purely technical mind might have desired something more, more than has been presented would have made the work cumbersome and less valuable and interesting to the average seeker after tree knowledge. The book is edited by Hu Maxwell, and published and for sale by HARDWOOD RECORD of Chicago, at $6 per copy—MISSISSIPPI VALLEY LUMBERMAN, Minneapolis, Minn.

"American Forest Trees" is the title of a book of over seven hundred pages, which has just come from the press and which will be sure to find a place in the libraries of hundreds of lumbermen, foresters and lovers of nature. It treats intimately the forest growth of the United States, but lays special emphasis upon those trees whose product in the form of lumber has attained commercial value. It brings together a series of articles that have been scattered through the pages of the HARDWOOD RECORD of Chicago during the past eight years and were written by the editor of that publication. They have been revised and edited by Hu Maxwell, who for a number of years was attached to the federal Forest Service as an expert. Each species is treated in a special article under its familiar commercial title, as well as under its botanic name, and each is accompanied by an effective halftone, full-page cut, showing the tree itself in all its majesty standing in its native woods. The book is of substantial size, bound in half leather, dark green roan back and corners, with basket cloth sides, silk headbands, gold stamping on the back and gilt top, and both as regards contents and general appearance it will make a substantial addition to any well-ordered library. Subscription price, $6. HARDWOOD RECORD, Ellsworth building, Chicago, Ill.—LUMBERMEN'S REVIEW, New York.

Henry H. Gibson, publisher of HARDWOOD RECORD, Chicago, has completed a great work under the title of "American Forest Trees." Mr. Gibson has been working on this for many years. It is really a compilation of articles which have appeared in his publication beginning in 1905 and ending in 1913. He has made this a study and became absorbed in it. The book is profusely illustrated, showing specimens of the different timbers described in it.

The book contains over seven hundred pages. There are over a thousand different kinds of trees listed and indexed with their common names; besides there are several hundred latin names given. The book shows great study and care. It is well printed on good paper, strongly bound in leather and cloth. The reader will find in this publication much of interest and will also be surprised at the amount of information collected by Mr. Gibson. He will read of trees concerning which he had no knowledge. He will see names of timber absolutely strange to him.

Mr. Gibson was assisted in his work by Hu Maxwell. Copies of this book can be obtained by writing the publisher. The price of the book is $6.00, postage paid.—WEST COAST LUMBERMAN, Tacoma, Wash.

The American Lumberman of Chicago don't seem to see much in "American Forest Trees." There are a lot of people who don't see much in The American Lumberman—so honors are easy.

The price of "American Forest Trees," delivered by express prepaid, is $6.00, and will be forwarded on approval to all responsible parties, on request, with the privilege of returning the book charges collect, within ten days, if it proves unsatisfactory. Address Book Department, HARDWOOD RECORD, Chicago.

Circassian Walnut Burls From Southern Russia

The burls of the Circassian walnut tree for veneers for the cabinet maker's use have for a long time been an important article of export from the region bordering the Black and Caspian seas in southern Russia. Originally all these burls were shipped to France and were called "loupes." Trebizonde in Turkey was formerly the center of this industry. After these burls reached France they were reshipped to England, Germany, and the United States. The French dealers always found it a very troublesome trade and were obliged to go to Turkey every year and proceed into the interior in order to judge for themselves of the character of the burls, which vary very greatly in price, according to age and quality.

These burls are now becoming very scarce and they are generally purchased from the peasants at much higher prices than formerly. By the time they are transported to the seashore and shipped to different ports in Europe they are often sold for fabulous prices. It would seem, however, that these French dealers realized very large profits, a fact which induced a number of timber merchants in England and the United States to undertake, on their own account, similar operations in Turkey with a view to saving the exorbitant profits of the French merchants as well as the expense of handling the logs and burls at the French ports. Practically all large dealers in Liverpool and London and a few American concerns get this valuable material directly from the place where it grows. As these burls, or ornamental knots, are now becoming scarce and are used in large quantities in the United States, it might be worth the while for American dealers to follow the example of English mahogany dealers in seeking a good substitute elsewhere. The Mexican and South American walnut has been suggested and while it is a shade darker in color, it is an admirable wood and deserves attention.

New Farmers' Alliance Needed

ARTICLE ONE

Editor's Note

The lumberman has heard much in recent years on the subject of lessening the waste in his logging and milling operations, and he has been given a great deal of free advice. The accompanying article and three others which will follow will have a few things to say on the lumberman's side; not in regard to his milling and logging, but in pointing out ways in which he can assist his brother, the farmer, in preventing some of the farm's leaks and in helping the farmer to realize some practical results from the doctrine of conservation.

The farmers of this country need more roofs worse than they need any other one thing. It is fashionable to discuss various kinds of conservation and how to turn them to practical account. There is conservation of forests; conservation of soil; conservation of water resources; conservation of mineral resources; conservation in better highways; conservation of health, and various other kinds, classes and degrees of conservation, all of which have received due attention, and all of which are worth still further attention. But there is a certain kind of conservation which comes a little nearer home than some of these, and it is no less deserving of attention. It relates to the saving to be made by farmers in the matter of roofs. The saving alluded to will not result from economy in roof material. It does not consist in buying something cheaper, or in getting along with less, but rather in more roofs and in putting them to better use.

It can be shown that one of the most profitable farmers' alliances that could be brought about would be an alliance between the farmer and the man who sells roof material—that is, the lumberman. Among the greatest leaks in the farmer's bank account is the money spent to make good the losses due to lack of shelter for various articles about the farm. These articles fall into several classes. The first consideration may be given to agricultural machinery.

The farmers of the United States pay more than $150,000,000 a year for new implements. This does not include half as much more for wagons. The two items exceed a total of $200,000,000 which comes out of farmers' pockets annually in this country to buy implements and vehicles. This is a good investment. It would scarcely be possible for agriculturists to make a better investment than that expended for good, up-to-date implements.

What care is given to this machinery after it is bought? Some of it is cared for as it should be. It is not unnecessarily exposed to sun and rain. When not in use it is properly housed. The farmer who takes that kind of care of his vehicles, implements and tools is not in need of any advice along that line.

Thousands of farmers do differently. A person need not travel farther than through a single state to see it. Costly implements are left standing in the weather days, weeks and months, to rust, warp and rot. If the plow is not left in the furrow where the hired man last unhitched from it, more than likely it lies by the fence. Perhaps it was dragged to the barnyard to keep company with a rusty mowing machine, a dilapidated reaper, a twisted horse rake, and an old wagon or two—all standing outdoors to dry, warp, twist and split in the sun, or swell up in the rain until the woodwork bursts and the metal parts become red and rough.

Such scenes are exceedingly common in practically every part of the United States. In some sections a person can hardly go a mile without seeing such a barnyard; in other sections he must go farther. Possibly conditions are a little worse in the South than in the North, for in the South many of the farms have no barn or shed of any kind where the tools can be sheltered, while in the North most of the farms have some sort of a shed, but often make little use of it.

Machinery thus exposed deteriorates rapidly. The paint peels off; the wood shrinks and the nuts work loose; twists and warps develop; the metal parts deteriorate by rust more in one month than they will wear out in a year of use. Farm implements should never be left idle in the sun or rain. Ample shed room should be provided on every farm and when a tool or vehicle is not in use it should go immediately into the shed. When wanted again it will come out in as good condition as when it went in; but if it has been left exposed to weather, it requires more or less overhauling before it is serviceable, in addition to permanent injury which is nearly certain to have occurred.

It is not the purpose of this article to advance argument to show that the farmer loses by this neglect to house his machines. The matter is so plain that it needs no argument. It may be stated, however, that estimates have been made by persons well posted that the farmers of the United States could save $50,000,000 a year in their implement bills by keeping roofs over what they buy. Machinery to that amount rots and rusts out every year, and roofs would bring about that saving.

The whole loss is not shown by rusted and useless machines which are thrown on the farmer's scrap heap when he buys new implements to take their place. The fifty million dollar investment in "dead horse" is only a part. The other part can not be so accurately measured, but it is probably not one dollar less. It consists in the poor work done by unserviceable implements—plows that turn a poor furrow and pull the horses unnecessarily while about it; mowers that drag and hog the hay instead of cutting close and even; rakes that rattle, pull hard, work poorly, and drop crooked windrows; wagons with loose tires, dished wheels and leaky beds; and other implements which require extra power to get even poor work out of them.

It may be asked what is this to the lumberman? Is he his farmer brother's keeper? To a certain extent he is. The lumberman has an interest in the agriculturist. Take the farm implements alone. The chief part of the material of which they are made comes from the forest, and it must be had in enormous amounts and it is high-grade stuff. The annual demand for wood in ten selected states will show this. The states are representative and the wood shown in the following table is the yearly demand by makers of agricultural implements.

ANNUAL DEMAND OF WOOD FOR AGRICULTURAL IMPLEMENTS

State	Feet	Cost
Illinois	187,983,000	$ 6,784,201
Arkansas	83,961,000	1,716,368
Kentucky	56,055,000	2,016,662
Michigan	47,840,000	1,717,786
Missouri	37,791,000	1,311,000
Virginia	19,891,000	530,754
North Carolina	19,127,000	461,807
Massachusetts	5,324,000	237,381
Texas	3,477,000	103,000
Maryland	1,956,000	72,180
Total	473,305,000	$14,781,139

The woods listed in the foregoing table are not more than one-third of the total for the United States. That means that not less than a billion and a half feet of first-class wood are required every year to supply the farmers of this country with agricultural implements, and that required for wagons adds many millions.

As far as the lumberman is concerned, it might be supposed that it is not to his interest that farmers should save their machines; that the more implements left to rot in the weather, the more wood the lumberman can sell to make new ones. That is a very narrow view to take of the matter. It is poor economy to destroy in order to replace. No farmer's ability to buy new machines is increased by permitting his old ones to rot and rust out. His necessities may increase but his purchasing power becomes less; and it is a well-known law of economics that the sizes of purchases are determined by ability to buy and not by

desire. "If wishes were horses, beggars would ride" is a homely expression of a profound economic law that applies directly in the case of farm machinery. Few farmers have as many implements as they want, and they buy others whenever they feel that they can spare the money.

It is the farmer who takes care of what he has who is best able to buy more; while the one who lets his plows and mowing machines fall to pieces in the weather is the slowest to buy something new.

Consequently, the manufacturers of agricultural implements, and through them the lumbermen, would increase their business if the farmers could be induced to keep their machinery under roofs when not in use. More machinery would be bought, and what was bought would last longer and give better service all around. The machines would last three or four times as long, but farmers would add many new ones with money saved by taking care of the old implements.

If the farmers of the United States can save $100,000,000 a year by housing their implements and wagons, they can afford to buy the necessary roofing material. If they spend half of that sum yearly in the construction of sheds for their machinery alone, they will still be $50,000,000 a year to the good, besides having the satisfaction of better machines, more of them, better work, and a very general improvement in farm conditions.

Railroads Show Decrease in Net Earnings

The Interstate Commerce Commission has secured fiscal reports from 151 railroads of the United States, covering the month of June, in which the rather startling loss in net operating revenues of $320,000 is shown. This loss is rather remarkable considering that the total operating revenues of these railroads increased from $207,778,328 in June, 1912, to $224,340,551 in June, 1913. The indication from these figures is that the influences which have caused some of the larger systems to report smaller net earnings in spite of greatly increased gross earnings in June were general in extent.

The report of the Pennsylvania Company was one of the most striking of this character. This system for the month reported gross earnings of $33,606,739, being the heaviest on record, owing to a very heavy traffic. In fact, the figures for only three or four months in the history of the road exceeded the gross receipts during June. The striking contrast is shown, however, in the net earnings, which, after deducting operating expenses from the gross, amounted to only $7,164,131, which was $1,250,000 less than in June, 1912. This figure has been exceeded by many months when the gross earning was not nearly so great.

Similar showings were made in figures for the first six months of the year, for even though gross earnings were nearly $5,000,000 greater than for the first six months of 1912, there was a loss in net earnings of $4,027,000.

The factors which have affected this condition are, probably, recent wage increases, extra crew laws, and other added expenditures, as well as increased taxes and higher costs of material. The recent flood damage was also an important factor contributing to the result, this being still charged against earning by some of the roads which suffered.

In view of these conditions, the retrenchment policy, which has been followed by most of the larger systems of late, cannot be considered as remarkable, and in fact it seems probable that this policy will continue to be in effect for some little time to come.

Marked Opposition to Currency Bill

Recent developments at Washington indicate a marked change of front in reference to the currency bill. Coming on the eve of the conference of the executive council of the American Bankers' Association at Chicago, this change of attitude seems to have considerable significance. Senator Owens, chairman of the committee on banking and currency, seems to have either seen the fallacy of certain provisions of the pending measure or else is convinced that it is doomed to defeat. It is difficult to say whether the next development will be an abandonment of any attempt to put through a permanent currency law at the present session or not.

Senator Owens is reported to have practically denounced the bill, which fact tends to encourage the bankers' conference at Chicago to make suggestions regarding currency legislation that will receive the support of the banking and business world. There seem to be conflicting reports regarding Senator Owens' attitude, some reports stating that he has said there is no basis for the story regarding his denunciation of the measure. At the same time, it seems to be pretty generally conceded that the present currency and banking bill as it now stands, and as it is fostered by President Wilson, will not become a law without radical amendments both in the basic principles of the law and in the technicalities.

One significant development in the situation as viewed by bankers is that the change of mind of Senator Owens precipitated a conference at Washington among the Democrats of the Senate banking committee, who discussed the senator's declaration that important changes, particularly relating to regional reserve banks, must be made before the bill could pass the Senate. It is probable that the Republican members will be called into conference to agree upon such a revised bill.

According to report Senator Owens has stated that he is not opposed to the proposed legislation nor is in opposition to the administration in this connection, but that he merely has come to realize that there are certain changes that must be made. The most important change is in connection with the regional reserve banks, it being decided as unwise to make an arbitrary number of twelve.

It is suggested in some reports that the new developments make possible an adjournment of Congress later than October 1. In this event it is very possible that instead of the passage of the currency measure, according to the wishes of President Wilson, the Aldrich-Vreeland emergency currency law will be adopted, and that changes will be made in that statute so as to bring the form of special currency within the reach of national banks, and making it workable and available without interpretation from the secretary of the treasury.

Peculiar Facts Regarding Osage Orange

While the wood of the Osage orange is not considered of much importance commercially, there are certain parts of the country in which it comes into extensive use. It is a peculiar wood, coming from a rather unusual tree and, while it does not attain proportions which would allow it to be cut into lumber of any reasonable dimension, it is admirably adapted because of its great hardness, strength, and durability to use for vehicle material. In this connection it is extensively used in the states of Texas, Oklahoma and western Kansas in the form of wagon felloes. In these states where excessive dryness and heat combine with sandy, rough and rugged roads with occasional rocks to relieve the monotony of an extended journey, it has been found that even the oak will not stand up to the necessary requirements. Oak in wagon felloes in those sections soon loses its life because of excessive dryness and in a short time is rendered useless because of the reduced strength and the hard service which it must necessarily withstand. Hence the use of the Osage orange for this purpose.

However, there is an interesting condition which develops in connection with this use of Osage orange. There is some property, either in the wood itself or lent by the atmospheric conditions or the rather unusual soil, which in connection with a wagon built with Osage orange as a part of its construction, immediately begins to take effect, unless the wagon is in constant use. It is said that a buggy or similar vehicle which is laid up in a shed for as much as a year without being used will at the end of that time be entirely useless simply because the peculiar conditions referred to which effect an almost complete decay. On the other hand, a wagon that is used constantly will be good for an indefinite period if properly constructed. This condition might serve as an interesting subject for an investigation on the part of those disposed in that direction.

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 535—Wants Ready Reckoner

Saginaw, Mich., Aug. 11.—Editor HARDWOOD RECORD: We are looking for an accurate ready reckoner that will give extensions on a range of sizes preferably from 2¼ x 2¼—4′ up to 12 x 12—50′, in steps of ¼″ in thickness and width, and 1′ in length. If you have such a reckoner or know of one published, we shall greatly appreciate your giving us the information regarding it. ———.

The concern writing has been advised that HARDWOOD RECORD knows of two such published works, one of which is Chaten's Lumber Reckoner, the other being Bauman's Ready Reckoner. HARDWOOD RECORD is, however, not able to give the address of either of these books. If any of our readers can supply the information, it would be greatly appreciated if they will write HARDWOOD RECORD office.—EDITOR.

B 536—Wants to Market Persimmon

Decatur, Ala., Aug. 14.—Editor HARDWOOD RECORD: Will you kindly give us a list of consumers who need 8/4 log run persimmon? We have a fair sized car of the above stock, band sawn, well manufactured, bone dry, and of high grade. ——— LUMBER COMPANY.

The writer of the above letter has been supplied with a list of buyers of persimmon. Others interested can have the address on application by referring to B 536.—EDITOR.

B 537—Seeks Soft Maple Cut

Chicago, Ill., Aug. 15.—Editor HARDWOOD RECORD: Can you place me in communication with some mills who are in a position to contract for a block of 4/4 and 5/4 soft maple to be cut and placed on sticks during the next three months? Shipment will be made during the first half of next year. ———.

The above writer has been supplied with a list of soft maple producers. Any others interested can have the address on application.—EDITOR.

B 538—Seeks Black Willow

St. Louis, Aug. 14.—Editor HARDWOOD RECORD: Can you inform us where we can buy laurel or willow wood?

——— LUMBER COMPANY.

The writer of the above letter doubtless refers to black willow. He has been advised of one source of supply for lumber of this variety. Any others interested in the inquiry can have the address on application.—EDITOR.

B 539—In the Market for White Oak, Birch and Gum Squares

Marion, Ind., Aug. 11.—Editor HARDWOOD RECORD: We are in the market for white oak, birch and red gum squares 3 x 3″, 14″ long. Can you put us in touch with parties who have this stock for sale?

——— COMPANY.

The above letter is from a well-known manufacturing institution which has been supplied with a brief list of manufacturers of the various kinds of dimension stock named. Any others interested can have the address on application.—EDITOR.

B 540—Seeks Red Birch

Boston, Mass., Aug. 11.—Editor HARDWOOD RECORD: We want for prompt shipment a carload of 5/8 firsts and seconds red birch, 80 per cent red on one face. Have you in mind the address of anyone who could supply this? ——— COMPANY.

The above letter is from a foremost wholesale Boston house, which has been supplied with a possible source of supply for this thickness of red birch. Anyone interested can have the address on application. EDITOR.

B 541—Wants a Market for Black Willow

Jonesville, La., Aug. 3.—Editor HARDWOOD RECORD: Please give us the names of firms that handle black willow lumber, logs or veneers. ———.

The above writer has been supplied with suggestions for a market for black willow. Any others interested can have the address on application. EDITOR.

B 542—Seeks Timber Prices

Centerpoint, Ind., Aug. 4.—Editor HARDWOOD RECORD: Please advise me the value and prices being received for different kinds of timber in the tree such as ash, poplar, sycamore, maple and sweet gum. ———.

The writer of the above letter has been advised that it is impossible to name any specific value on standing timber from the information at hand. Many conditions prevail that materially vary the value of timber on the stump, such as location, quality, quantity per acre, area of the tract, logging facilities, proximity to transportation, etc.—EDITOR.

B 543—Seeks Hemlock, Pine and Rough and Dressed Poplar

Cincinnati, O., Aug. 20, 1913.—Editor HARDWOOD RECORD: We are interested in several cars each of the following lumber: 1 x 4 No. 2 common hemlock, rough; 1 x 4 No. 3 common yellow pine flooring (dressed) 13/16″ one or two sides; No. 3 common ½″ poplar; 4/4 No. 3 common poplar resawed.

Will you kindly place our wants before concerns who are manufacturing this grade of stock at once and direct, if convenient; or favor us with the names of manufacturers? Your assistance in this instance will be very much appreciated. ———.

The above inquiry is from a well-known furniture house, to whom the addresses of sundry manufacturers of these varieties of lumber have been given. Any others interested may have the address upon application.—EDITOR.

B 544—Seeks Directory of Hardwood Mills

Alexandria, La., Aug. 19.—Editor HARDWOOD RECORD: Will you be kind enough to advise whether there exists a directory of all the hardwood mills in the United States, and where same could be had?

LAND COMPANY.

The writer of the above letter has been advised that no exclusive directory of hardwood mills has ever been printed, but this information is in card index form in the office of HARDWOOD RECORD, and a copy of the list can be obtained at reasonable cost.—EDITOR.

Clubs and Associations

Grand Rapids Trade in Picnic

Members of the Grand Rapids Lumbermen's Association, with their families and invited guests, making up a merry party of 110 people, greatly enjoyed the fifth annual picnic held Saturday, Aug. 16, at the Plainfield Country club. The day proved a record-breaker from the weather standpoint but the program of sports was carried through just the same, with prizes awarded to the winners, and many of the contests were close and exciting. A chicken dinner was served and music and dancing closed the day's events. Billy Vogelsang of the Turtle Lake Lumber Company was chairman of the picnic committee this year, and was assisted by President Earle Crossman, W. E. Cox, Dave Wolf, Willard Barnhart Jr. and H. L. Foote.

Will Not Establish Traffic Bureau

The Louisville Hardwood Club announces that because of the likelihood of the establishment of a traffic bureau by the Louisville Commercial Club, the Kentucky Manufacturers' and Shippers' Association or the Board of Trade of Louisville, the hardwood club has decided to hold off further plans regarding the proposed bureau of that kind, pending the ultimate decision of one of the other Louisville organizations. It is an assured fact, however, that the establishment of a competent traffic bureau will take place in the near future.

Philadelphia Golfers in Monthly Meet

The Philadelphia Lumbermen's Golf Club, through the courtesy of Joseph W. Janney, held its monthly tournament on the links of the Philadelphia Country Club, Bala, Pa., on Aug. 13. In spite of the superstitiously dreaded date of 13, and that the morning woke with a cloudy, sulky countenance, the jolly sportsmen whom good luck had never failed to attend at any of their appointed meets, were promptly on the grounds, and though the heavens threatened at times it was not until after the last foursome left the last green that old Jupiter Pluvius emptied his bags of a mild deluge upon the premises, and as further proof that he is the lumbermen's tutelary Deity, tightened up the strings in time for a clear homeward journey. A vague suspicion prevails that either President Frank Buck or the indomitable Ben Currie holds secret communication with his majesty.

Twenty-two golfers, many of whom covered these grounds for the first time, divided into four foursomes and two threesomes, entered the game. Numerous changes had been made in the links: new holes created and many of the old bunkers and sandholes mostly hidden by the rolling country still remained, and at times were so unexpectedly encountered that even Ben Currie, who is usually abundantly equipped, could not find suitable (French) expletives to relieve his feelings. William, familiarly Billy, Meyer mildly remarked that the place looked like a bunker shop. [illegible] these obstacles, however, very fair

scores were made. R. Wyatt Wistar came off winner with a score of gross 86, net 79, and received as prize a pair of golf shoes, but as they were big enough to fit John H. Schofield, who is of a generous anatomy, he will be permitted to exchange them for a smaller number. Ben C. Currie, the second winner, was awarded a handsome silver penknife, and W. H. Smedley, third best score, was in luck with a package of golf balls. After a sumptuous dinner the meeting was called to order by President Frank Buck, at which resolutions expressing thanks to W. H. Fritz and the St. David's Club for courtesy in extending grounds to the club in July, and to Joseph W. Janney and the Philadelphia Country Club, for like compliment, were passed.

It was announced at this meeting that the first annual meeting of the club would be held in September, at which the election of officers for the second year will take place. To Frank Buck, who has proved a model golf club president, and to Eugene W. Fry, his efficient side partner, and the indefatigable Ben Currie, secretary, all honor is due for the successful manner in which the club has been conducted this first year, and it goes without saying that their re-election will only be a matter of form. The next game is scheduled to be played on the Huntingdon Valley Golf Club grounds, Noble, Pa.

Forty-seventh G. A. R. Encampment

The Chattanooga encampment of the Grand Army of the Republic and allied organizations will take place on Sept. 15-20. In connection with the arrangements for the entertainment of the vast number of visitors who will attend the encampment the lumbermen of the city have been conspicuous. Chattanooga will take care of every visitor. The homes of all citizens will supplement the hotel and boarding house accommodations and the veterans and their friends will all be well cared for at reasonable rates.

On May 27, 28 and 29, when Chattanooga entertained the Confederate veterans, for more than four months previously the leading business and professional men of the city, to the number of over 1,200, joined hands in preparing for the mammoth task of entertaining them. For many years there has been a growing sentiment among the Federal survivors that they should, as an organization, make one more pilgrimage to the Chattanooga battlefields. With happy coincidence, the invitation of Chattanooga was extended and accepted for the 1913 encampment so that it marks the semi-centennial of Missionary Ridge, Lookout Mountain and bloody Chickamauga. In fact, the very dates selected cover the fiftieth anniversary of the last named battle.

It is possible that attendance at the reunion will be well over the hundred thousand mark. Grand army encampments have drawn crowds ranging from 200,000 to 600,000 visitors, even though held in cities that could not vie with Chattanooga in scenic outlook, transportation facilities, or historic associations.

In view of this enormous influx of visitors, the executive committee of the incorporated Encampment Association has made ample preparations. Unusually low railroad rates will be in effect for the encampment and this, with the features offered by Chattanooga, will bring thousands to the city, not directly connected with the event itself.

Members of the Chattanooga lumber trade have been conspicuous in assisting in raising the $50,000 subscribed for the entertainment of the visitors. They have also been active in the work of arranging the immense number of details contingent upon such a visitation. A trip to the encampment will be a very appropriate vacation journey for anyone who is desirous of seeing the guardians of the Union together and at the same time of visiting a beautiful, interesting, and historic country.

With the Trade

R. S. Bacon Plans Interesting Trip

R. S. Bacon, the live wire head of the R. S. Bacon Veneer Company of Chicago, has bought his ticket to embark on Sept. 2 on the Hamburg-American liner, Kaiserin Augusta Victoria, for a two months' trip, which will take him to many of the interesting cities of Europe and on which he will spend three weeks in the heart of the Caucasus region producing the famous Circassian walnut.

Mr. Bacon will be accompanied by Mr. Penrod of the Penrod Walnut & Veneer Company, Kansas City, Mo., and together these men will be met by Henry Hoffman, Mr. Bacon's representative in the Caucasus. Mr. Hoffmann has spent a great many years in that region and is as well posted as any human being on the growth and history of Circassian walnut, he being an expert on Circassian walnut logs.

From Hamburg, where Mr. Bacon and Mr. Penrod will land, they will go through Denmark, Norway and Sweden, and from there to Odessa, Russia, via Berlin. From Odessa the party will go by way of the Black Sea to Batoun and Poti in the Caucasus, where they will go right into the Circassian walnut country and make a close study of its growth, peculiarities and history. Coming back they will stop at Constantinople, and from there go to Paris via Vienna.

Mr. Bacon and Mr. Penrod are planning attending the Liverpool mahogany sales in October, from whence they will return to the United States.

Big Maine Timber Deal

The most important sale of timberlands and mill property of recent years in Maine was completed on Aug. 15 when the large holdings of the heirs of the estate of the late William Engel of Bangor were sold to a syndicate composed of James M. McNulty, O. S. Townsend, and Isaac N. Peirce, all of Bangor, and all prominent in the lumber business. The deal involves 115,000 acres of timberland and the consideration is $525,000. In addition to the land, there was transferred a sawmill at East Hampden, a water power mill at Orono, and the principal interest in the box mill at Old Town. All of these mills will be operated by the new owners.

Sash and Door Plant Has Disastrous Fire

The Rock Island Sash and Door Works of Rock Island, Ill., suffered a fire loss of between $25,000 and $50,000 to its plant and stock on Aug. 15. The efficiency of the sprinkler system in the warehouse saved the company from a much heavier conflagration. The blaze started about one o'clock and gained considerable headway before sufficient help arrived, but after the fire force was organized it was not long before the blaze was extinguished. Most of the damage was to finished stock.

An Immense Cypress

The Fee-Crayton Hardwood Lumber Company of Dermott, Ark., is shipping hardwood logs from its various lumber holdings. A man named Tom Bell is superintending the hauling of logs from certain points in the Mississippi bottoms. He tells of his discovery of a monstrous cypress tree belonging to that company in the section where he is logging. This tree, according to his report, has 14,000 feet of lumber in the first twelve feet of the butt cut and the whole tree has 68,000 feet in it. According to Bell's statement, the company has offered to pay $750 to any person who will fell the tree and put it in the Mississippi river.

The above tale, which HARDWOOD RECORD tells with its fingers crossed, is reported to have been verified at least in part. Manager R. W. Marks of the Fee-Crayton Hardwood Lumber Company is reported to have made the statement regarding the tree that he will offer anybody $750 merely to cut it and clear sufficient right of way so that the log can be hauled. According to Mr. Marks, the tree is thirteen feet in diameter and sixty-five feet to the first limb. It has, according to his statement, 14,000 feet in the first cut and 50,000 feet in the whole tree. It is estimated to be over 2,000 years old and is the second largest tree in the world, the estimated age of the largest, which is on the Rio Grande river, being 6,000 years.

Change in Cumberland Valley Lumber Company

A. Headley Card, general manager of the Cumberland Valley Lumber Company, Cincinnati, O., has resigned and will at once become identified with the Straight Creek Lumber Company of Pineville, Ky. Mr. Card was very popular in the lumber trade and his leaving Cincinnati will be regretted by many local friends. M. J. Byrns of the Conasauga Lumber Company will succeed him as general manager, and the nice business already developed by Mr. Card in the two years of his management of the company will be further increased by Mr. Byrns, who is a thorough lumberman, having started his career at Nashville about twelve years ago. For the last six years he has been with the Conasauga Lumber Company, dividing his time for the first three years at the company's big band mill at Conasauga, Tenn., and the last three years he has been identified with the selling end exclusively. The company was incorporated two years ago for $50,000 paid in capital stock. The officers are C. B. Benedict, president; John W. Love of Nashville, Tenn., vice-president, and John Byrns of Cincinnati, secretary and treasurer. The company deals exclusively in hardwods and has done well to date. General Manager Byrns has been given full authority to go as far as he likes, and intends to increase the business just as fast as possible.

German-American Lumber Company Purchases Timber

The German-American Lumber Company, through its representative Julius Schreyer, has purchased an immense stand of timber in western Florida, where the company already owns extensive holdings and operates a large sawmill. The Betts tract of 65,000 acres of virgin timber is one of the tracts and in addition 36,000 acres of high-grade stumpage has been bought from G. H. Drummond. The German-American Lumber Company's mill is located at Millville, Fla., which is within easy transportation from the newly acquired timber holdings. It is planned, however, to erect another mill on the new timber.

Big Imports of Mahogany

A shipment of between 7,000,000 and 8,000,000 feet of South African and British Honduras mahogany logs is about to be started by the C. C. Mengel & Bro. Company of Louisville, Ky., which concern has chartered steamers which will bring the logs to Pensacola, Fla., during the next four months. The first cargo of some 4,000 logs is now being unloaded at that port. The shipment will include eight additional cargoes which will arrive before the first of January. Three steamers are now en route from the West coast of South Africa, the first of which is due some time next month. In addition to the shipments from Africa the company will receive an average of a steamer each month from the British Honduras mahogany section. The Mengel company owns a great deal of mahogany timber in that country and maintains extensive logging operations. Shipments will go from Pensacola direct to Louisville and constitute the greatest importation of mahogany through Pensacola in the history of that port.

Death of George B. Miller

The death of George B. Miller, president of Miller, Sturm & Miller, which occurred at Saranac Lake, N. Y., on Aug. 16, came as a shock to his many friends in Buffalo. Although it was known that he was seriously ill, hope was expressed for his recovery until a few days before the end came. The blow is rendered more severe by the fact that Mr. Miller was only thirty-three years of age and had but recently started in business for himself with a seemingly bright future.

Born at Dunken City, Mich., Nov. 18, 1879, the son of the late August and Johanna Miller, he had spent his school days and business life in Buffalo. He began the lumber business as an employe of the Empire Lumber Company, and shortly after reaching his majority went to work for O. E. Yeager, with whom he remained twelve years. Mr. Miller was Mr. Yeager's right hand man, having to a large extent charge of the business, and coming into contact with lumbermen not only in this city but in other markets. Last December he and his brother, William P., and Elmer J. Sturm formed the corporation of Miller, Sturm & Miller, taking over the yard of the late F. W. Vetter.

Of a winning personality, Mr. Miller made many friends and was active in Hoo-Hoo, the Lumber Exchange, the Masonic order and the Foresters. He leaves two brothers, William P. and Harry J., and three sisters, Mrs. Edward McCormick, Mrs. Arthur Smith and Mrs. Robert Miller. The funeral was held on Aug. 19 and was attended by many lumbermen and other friends.

Rebuilding Maine Mills

A new hardwood mill is being erected at Harvey's Siding, between Monticello and Bridgewater, Me., by a concern known as the Maine Last Block Company. This mill will employ a large crew and will turn out about 400 carloads of hardwood products yearly.

The Portage Lake Mill Company is rebuilding its mill at Portage Lake, Me., which mill was destroyed several months ago. The new mill is to be larger than the old one.

The Dangler mill at Soldier Pond, Me., which burned in July, is to be rebuilt at once.

The owners of the mill at Belvidere Siding, which was burned in 1912, have completed the erection of a new mill on the old site, which mill is now in full operation.

A Lumberman Honored

President Charles H. Barnaby of the National Hardwood Lumber Association recently announced the appointment of Earl Palmer of Paducah, Ky., as national councillor of the Chamber of Commerce of the United States of America. In the September number of the association bulletin Mr. Palmer will give his views of the work that the Chamber is carrying on and its applicability and value to its affiliated organizations in general and to the National Hardwood Lumber Association in particular.

The work of the National Chamber of Commerce has been much talked of recently and the address of its president, Harry A. Wheeler of Chicago, delivered before the June convention of the National Hardwood Lumber Association proved mighty interesting and instructive to those fortunate enough to hear it.

Wood-Mosaic Company, Inc., Will Probably Rebuild at New Albany

The Aug. 10 issue of HARDWOOD RECORD contained an account of the serious fire at the plant of the Wood-Mosaic Company, Inc., New Albany, Ind., on Aug. 1. The fire involved a loss of $200,000 and destroyed the flooring plant, veneer mill, dry kiln and other buildings, although a large quantity of logs was saved. The spectacular nature and complete destruction of the fire are well illustrated in the two accompanying photographs. The fire was the biggest ever seen in the vicinity of New Albany and attracted a large crowd.

W. A. MacLean, president of the Wood-Mosaic Company, Inc., announces that the company will probably rebuild at New Albany, using steel and concrete construction and electrical machinery throughout.

Quick Work

Recently C. L. Willey, the well-known imported lumber and veneer manufacturer of Chicago, had a rush order for a car of one inch mahogany. The lumber was sawed, steamed and toned in his Kraetzer preparator, placed in his dry kilns for four hours to blow out superficial dampness, and loaded on car the same day at normal shipping weight.

Although there are many instances recounted where green lumber of various kinds has been Kraetzer-cured and blown out in the open or in a dry kiln, and shipped in three to five days, this is the quickest action that has yet been recorded in delivering shipping dry stock.

The Kraetzer Company, 537 South Dearborn street, Chicago, manufacturer of the Kraetzer wood-steaming cylinder, known as the Kraetzer preparator, is having continued success in the sale of the apparatus, and every owner is enthusiastic over the quick and highly satisfactory results he is attaining by the use of the apparatus and process involved.

Among the recent purchasers of Kraetzer equipment are: the Norman Lumber Company, Louisville, Ky., for its Holly Ridge, La., plant; Himmelberger-Harrison Lumber Company, Morehouse, Mo.; Poinsett Lumber & Manufacturing Company (The Singer Manufacturing Company), Trumann, Ark.; the John Dulweber Company, Cincinnati, for its new Moorhead, Miss., plant; and George C. Brown & Co., Proctor, Ark.

Richardson-McDonald

Ambrose M. Richardson, more familiarly known as "Rich," of Osgood & Richardson, Peoples Gas building, Chicago, is to be married on September 6 to Miss Louise McDonald, of St. Joseph, Mo. The ceremony will take place at Christ Episcopal church, St. Joseph, and the Rev. Atwill will officiate.

Mr. Richardson plans to be away during most of the month of September, when he and his bride will return to Chicago. They will be at home at 5334 Kimbark avenue the latter part of September. HARDWOOD RECORD unites with Mr. Richardson's many friends among the lumber trade in wishing him all the happiness and success in the world.

Auto Company Discontinues

The American Locomotive Company, manufacturer of the "Alco" car, announced on August 21 that it had discontinued the manufacture of automobiles. This company was one of the three largest makers of autos in the country. The decision was reached by the board of directors at a meeting on August 13. Nothing was said about it until after a second meeting held on August 21.

The company will fulfill all its obligations given under guaranty to previous customers, and arrangements will be made to furnish them with repair parts for a period of not less than five years.

Pertinent Information

Big Import of Trees and Seeds

Figures gathered by the federal quarantine board of the Department of Agriculture show that during the past fiscal year 3,779,041 growing trees and 15,040 pounds of tree seeds were imported into the United States. The trees include, say the members of the board, valuable species that do not grow in the United States and stock which can at present be bought more cheaply abroad. The tree seeds imported are largely for the purpose of reforesting land, though in a number of cases they are used in ornamental planting on individual estates.

France leads in the number of growing trees sent here, with a total of 1,782,255. Germany is second, with 849,245, and Holland third, with 690,632. Imports are made from thirteen other countries, including India, Japan, and Australia.

The trees and shrubs imported are chiefly evergreens, such as pines, spruces, and firs, and broadleaf plants—oaks, maples, etc. The majority is stock of foreign origin, though in a few cases cultivators abroad



ILLUSTRATING COMPLETE DESTRUCTION CAUSED BY FIRE AT PLANT OF WOOD MOSAIC COMPANY, NEW ALBANY, IND.



FIRE AT ITS HEIGHT—ITS SPECTACULAR NATURE ATTRACTED AN IMMENSE CROWD OF SPECTATORS

through a special selection of attractive forms of our native trees have developed them to such an extent as to make them desirable to purchasers here.

Besides more than seven tons of tree seeds, many thousands of pounds of seed of perennial and annual plants, bulbs, and fruit stock, as well as ornamental shrubs, are imported. The greater part of the tree seeds, or more than 7,000,000 pounds, come from Germany.

A Large Slab of Redwood

The College of Forestry at Syracuse, N. Y., recently received in New York a heavy plank from one of the large redwoods in California. This measures 7x11 feet and is probably the largest slab of any kind of wood in New York state outside of the Museum of Natural History in New York. Besides this piece of redwood, the college has secured what is thought to be the largest trunk of an ironwood so far found in New York state. This trunk has a diameter at the base of twenty-five inches and came from a tree growing under very favorable circumstances in the city forest at Syracuse. The college is securing valuable specimens of timber from all parts of the state for its museum, with the idea of making the forest museum of the college of forestry the most complete of its kind in the United States.

Advance Probable in Oversea Freight Rates

The trade press in England scents trouble in the way of an advance in lumber freight rates in shipments from the eastern coast of the United States to Europe. A recent comment on the subject says that agents, importers and merchants have the matter of freights from the east coast ports of the United States forcibly brought before their notice by the fact that it is known that the managers of the various steamship lines have come over from the other side in order to deliberate upon freight matters. This "deliberating," put in the boldest language, simply means that further "advances" are in store for those who pay freight on lumber. As far as can be gathered, the increases will not be one or two cents per 100 pounds; something like seven to ten cents are feared, because the steamship lines contend, rightly or wrongly, that lumber does not pay at present prices. If this is the case, what must the result have been where rates were from thirty to forty per cent lower? There can be little doubt that present freight rates are remunerative, and it is questionable if lumber and kindred commodities will stand much more, at any rate not in the wholesale fashion which is talked of in shipping circles.

Muskegon Ships First Lumber Cargo in Years

The first vessel in years to take a cargo of Muskegon cut lumber out of that port, namely, the steam barge Suzie Chipman of Milwaukee, recently cleared at the Gow dock for Milwaukee. The Chipman's cargo is made up of lumber cut from logs raised from Muskegon lake and the departure of the boat brings to the minds of old residents memories of the old lumber era in Michigan when Muskegon was the greatest lumber shipping city in the world.

Deadhead Logs Start Court Action

Twenty-eight Alpena county (Michigan) residents are made defendants by an injunction issued recently at the institution of the Alpena Log Owners' Protective Association to restrain the defendants from moving "deadhead" logs from Thunder Bay river and its tributaries. It is said that the idea prevails that sunken logs in a river belong to any who might take them. It is alleged that one man pulled upwards of 100,000 feet of logs from the river last year and that he now has about 3,000 logs pulled out near Hillman and has a mill engaged to cut the logs into lumber.

The protective association is composed of the Churchill Lumber Company, the Richardson Lumber Company, the Island Mill Lumber Company, the Fletcher Paper Company, the Estate of Frank W. Gilchrist and other lumbermen who own logs in Thunder Bay river.

Cincinnati Teamsters' Strike Broken

The teamsters' strike that has been the cause of a general suspension of business for the past thirty days appears to be broken and the merchants and manufacturers who have stood by the team owners in their fight are jubilant over the prospects of a resumption of business and also over the fact that they have won out over the strikers, which should have a very good effect in stopping some of the many other branches of labor from making good their threat to strike just as soon as the teamsters win their fight. So much depended upon the result of this strike that it was absolutely necessary for business men to stick together and take their losses right now in order to prevent further trouble. It is believed that the strike is surely broken for good and others will think twice before permitting the numerous out-of-town labor organizers who have been here for a month or more stirring up trouble and expecting to win this strike so that they could start another in some other branch of trade. The lumber trade has been at a standstill so far as city business is concerned, but those dealers who have tracks into their yards have been able to receive and ship without any delay, while other dealers who are located off of railroad switches have shipped very little and received but few cars and have been paying demurrage charges on many cars that could not be hauled from freight yards.

Liverpool Conditions in July

According to recent information from Liverpool, the arrivals of forest products from North American ports in July aggregated 23,870 tons, as against 21,363 tons in the corresponding months last year. The importation of oak logs during the month of July consisted of but a small parcel from the United States, the demand being quiet with light stocks and firm prices prevailing. There were fairly large arrivals of oak wagon planks and the deliveries were equal to about half of the imports. Stocks were heavy and prices without change.

The import and consumption of elm during the month was meagre, with a corresponding condition in ash. There was a good import of walnut logs from the United States, with a fair demand and steady prices prevailing for prime wood. Walnut lumber was in fair demand at good prices. The demand and prices for satin walnut or red gum, however, were weak.

The import and consumption of birch logs during July was small and light stock and firm prices prevailed. Planks were moderately imported and deliveries were fair. Heavy stocks prevailed, with firm prices.

In mahogany, there was an active demand for plain and figured African wood, with continued firm prices. Stocks were light and excellent results in evidence for early shipments. Shipments of fresh and squared Columbian logs were satisfactorily received, although inferior stock was not called for. In the Cuban wood, there was a steady demand for sound straight logs of medium and large dimension, while finely figured wood brought high prices. According to the report there had not been any stock of Tabasco mahogany in brokers' hands for some time, with the result that there was a strong demand for this wood, with very favorable prospects for the reception of good shipments. Richly figured St. Domingo logs of good dimensions realized high prices as was the case also with sound plain wood of medium to large dimensions.

Train Corps for Fighting Fires

Bulletin No. 65, issued by the Lumbermen's Underwriting Alliance of Kansas City, Mo., gives some useful detailed information as to plans adopted at various mills for training corps of fire-fighters and having them subject to call. Previous bulletins have given outlines of fire-fighting departments maintained at a number of southern plants. This information has been influential in inducing the organization of fire fighting brigades at other properties. The new bulletin calls attention to the methods employed in northern mills. The organizations described are such as could be maintained at the average plant where an expensive equipment along city lines is not justified. Future bulletins will describe one or more fully equipped mill fire departments at some of the largest properties. According to the bulletin, it has been intimated that many owners and managers would like to bring into existence and maintain drilled fire corps but do not know just how to equip, train and detail the men for effective work.

Contrary to its usual policy, the bulletin indulges in a little subtle humor in describing the fire-fighting organization employed by the Worcester Lumber Company, Chassell, Mich. W. W. Warner, the plant superintendent, is the chief of the fire organization and, according to the bulletin, he is familiarly known by the men in his employ as "Water-water-water." The bulletin opines that he must either get the sobriquet from the initials of his name or because he, like the water in the poem of the "Ancient Mariner," is everywhere.

At the mill of Jackson & Tindle at Pellston, Mich., there is maintained in addition to the usual equipment of inside hydrants and hose, three hose carts with 2,500 feet of hose and also a fifty gallon chemical fire extinguisher mounted on wheels. The fire-fighting corps is completely organized with chief, assistant chief, engineer and assistant engineer, all of whom are experienced sawmill men. Each of the hose carts has a crew of five men who have instructions to go at once to their hose house as soon as an alarm of fire is given. Each hose house has a captain who has had special instructions in the location of hydrants and the quickest method of making connections whether to hydrants or in connecting one length of hose to another.

Other interesting features employed at various plants in the United States and Canada are pointed out in the bulletin, such as surprise practice for fire corps, sleeping quarters within quick reach of the mill, the maintenance of trained messengers who immediately make known to the various crews the exact location of the fire. Other crews are trained for systematic handling of fire extinguishers while one crew is trained for individual work in the event that neither the captain nor his deputy is present. Another company employs a system of credits and demerits for quick and effective work at fires.

The bulletin contains a complete outline of the fire-fighting plan of the Norwich Lumber Company of Buffalo at its plant at Norwich, Pa. This concern maintains nine hose companies, each of which has separate organizations and separate instructions as to where to report on receipt of a fire alarm. Upon the detection of a fire the power house is immediately notified and the mill whistle gives the general alarm, following which signal alarms are given in order to show the exact location of the fire.

Detailed instructions are given, such as the maintenance of from eighty to a hundred pounds of steam in pump gauges; increasing speed as the demand of water through hose streams requires it; lines of hose must be laid at once and water gotten on the fire as quickly as possible; kinks or twists in the hose are warned against, which are liable to pull the hose away from the nozzle man when the water is turned on; short

bends in the hose near the play pipes make it almost impossible to hold the pipe, whereas when it is under an easy curve the recoil is reduced to a minimum; the stream should never be manned on a roof with less than three men and they should be reinforced with extra men to pass signals; in most cases, 100 pounds at pumps is the maximum pressure necessary.

The bulletin then gives a description of various fires which have occurred among its membership during June and July and closes with a resumé of the fire tax on lumbermen's resources during June. More detailed description of the latter is contained in another article in this issue of HARDWOOD RECORD.

Compromise in New Orleans to Memphis Mahogany Rates

The Southern Hardwod Traffic Bureau of Memphis, Tenn., through J. H. Townshend, reports that a compromise has been effected in the case of the Memphis Veneer & Lumber Company against the Illinois Central and the Yazoo & Mississippi Valley roads whereby a rate of twelve cents per hundred is to be given on shipments of mahogany logs from New Orleans to Memphis, effective Sept. 1. The old rate was fifteen cents. The bureau asked for a rate of nine cents but although a petition had been filed with the Interstate Commerce Commission to this end, the compromise was effected without the aid of that body. The securing of this lower rate removes a serious obstacle to the importation of mahogany logs at Memphis and it is stated that, with the lower rate, there will be several firms embarking in this particular branch of the lumber industry. These logs will be brought from British Honduras and other mahogany producing countries via New Orleans.

Number and Performance of Freight Cars

This abstract, taken from Trade and Transportation, is based upon the compilations covering the fiscal year ended June 30, 1912, made from the annual reports of carriers having gross operating revenues of $100,000 or more for the year and also of railway companies owning property operated by the same carriers under lease or other agreement, which have been made in advance of the completion of the twenty-fifth (or 1912) annual report on the statistics of railways in the United States. The omission of returns for small roads (having operating revenues below $100,000) prevents the showing of items comparable with complete figures for 1911. None of the statements includes returns for switching and terminal companies. The figures given in the abstract may be somewhat modified by revision before they are presented in the full report for 1912.

The total number of cars of all classes in the service of such roads was 2,368,658 (or 25,245 more than on June 30, 1911), which equipment was thus assigned: Passenger service, 50,606 cars; freight service, 2,203,128; company's service, 114,924. The figures given do not include so called private cars of commercial firms or corporations.

Of cars in freight service, there were classified 2,202,966, with an aggregate capacity of 82,647,959 tons.

The number of tons of freight reported as carried (including freight received from connections) by roads represented in this statement, for the year ended June 30, 1912, was 1,818,232,193, while the corresponding figure for the previous year was 1,753,189,939, the increase being 65,042,254.

The ton mileage, or the number of tons carried one mile, as reported by the carriers under consideration for the year ended June 30, 1912, was 262,955,605,123. The corresponding ton mileage as reported for the year ended June 30, 1911, was 253,456,389,237, from which it will be seen that the increase in the ton mileage for the year ended June 30, 1912, over the returns for 1911, as applying to the roads represented in this abstract, was 9,499,215,886. The number of tons carried one mile per mile of road for the year ended June 30, 1912, was 1,108,578, as against 1,088,314 for the preceding year. The average number of tons of freight per train mile was 409.29. The corresponding figure for the preceding year was 386.17.

The operating revenues of the railways in the United States for the year ended June 30, 1912, herein represented (average mileage operated 237,809.09 miles) were $2,826,917,967; their operating expenses were $1,958,963,431. The corresponding returns for 1911 (average mileage operated 234,366.14 miles) were: Operating revenues, $2,772,733,828; operating expenses, $1,901,399,475.

Operating expenses as assigned to the five general classes totaled $1,958,963,431.

To Save Unnecessary Freight

Traffic automatically follows the shortest route, so that it obviously follows that if traffic centers of restricted areas are established, congestion will result, that if artificial obstructions to traffic routes are allowed, valuable time and energy will be consumed in getting around these obstructions.

In the consideration of freight traffic, in any large community, a great number of cars are brought into various railway yards, switched to other yards, and then drawn out of the community unopened. Other cars are brought into the yards, unloaded and their contents carted across the city, placed in warehouses, only to be carted away again, loaded into cars and shipped out of the city. All of this involves expense, which adds to the selling price of merchandise. The suggestion made to overcome this wasteful effort is to establish large freight and warehousing centers where cars not consigned to the community would be segregated and merchandise intended for reshipment would be warehoused and handled to a large extent by machinery.

June's Fire Tax on the Lumbermen's Resources More Than Three Million Dollars

The general fire loss total for June was very close to $25,000,000, according to the last bulletin of the Lumbermen's Underwriting Alliance of Kansas City, Mo. This is an increase of more than $4,000,000 over the exceedingly high losses of June, 1911, which up to that time was the heaviest for many years. The reported losses on lumber manufacturing plants reached $2,890,000. Figures on a number of large fires have not been made available, and with unreported losses, will undoubtedly swell the contribution to the grand total to much over $3,000,000. These figures do not include the timber destroyed in the forest fires of the month, and therefore do not represent the entire fire loss to lumbermen. There were fewer lumber property fires in July, but some exceedingly heavy losses. Practically every case where particulars were available the fires originated from conditions against which the Alliance has tried unremittingly through its inspection work and its fire bulletins to safeguard its own plants.

Overheated journals and friction troubles have been responsible for more recent fires than any other one cause. Three of the heaviest losses of the year are attributed to this source.

It is reported that the fire resulting in the destruction of the big new mill of the Big River Lumber Company, near Prince Albert, Sask., started from a hot box about seven o'clock in the morning, shortly after the day crew had come on duty. This fire is reported to have cost close to half a million dollars.

A second example is furnished in the burning of the planing mill and 50,000 feet of lumber at the plant of the Escambia Land and Manufacturing Company, Pace, Fla. The blaze is believed to have originated from a hot box in the shafting located in the general work room. The loss is estimated at from $20,000 to $30,000.

At the plant of the H. H. Hitt Lumber Company, Falkville, Ala., the fire which took the planing mill, dry kilns and several hundred feet of dressed lumber is supposed to have originated through friction of a belt and transmission machinery.

The fire destroying the sawmill and planing mill of the Kirby Lumber Company, Kirby, Wash., together with dry kilns and more than a million feet of lumber is thought to have been caused by a hot box in the planing mill.

Hot box fires usually mean that muck and dust deposits about bearings and supports have not been closely enough removed. If the bearings are thoroughly brushed each day with a stiff-bristled brush—such as is used in cleaning castings—and if the cleaner will include the framework within arm's reach, there will not be sufficient fuel left in the vicinity of the bearings to feed and spread the flames.

The million dollar fire on the night of July 12 at the Michigan City plant of the Barker & Haskell Car Company is reported to have started in a pile of waste in the lumber yard of the plant, where a spark from a locomotive fell and smouldered. A gale from Lake Michigan was sweeping over the plant at the time and the flames attacked the lumber with such intensity that the local fire companies were helpless. Before outside aid arrived dynamite was resorted to as the only means of checking the fire.

In nearly every Alliance inspection report will be found in connection with the description of boiler house conditions a reference to the presence or absence of fine, dry dust on boiler tops. It has always recognized in such deposits an opportunity for ignition and instant spread of flames throughout the boiler room.

In spite of recent rains, wet premises and absence of wind, the lumber, shingle and lath mill of G. A. Bergland, Bergland, Mich., was entirely destroyed about 2:30 on the morning of July 4. Mr. Bergland attributes the origin of the fire to "spontaneous combustion" of dust on top of boilers. The spread of the fire to other divisions was prevented by tearing down connecting trams.

F. O. B. Prospects in England

The position of business generally has been receiving attention, and the question of a continuance of the present brisk trade and high prices has been under consideration. In a recent issue the Timber Trade Journal says:

"For many months past the idea has prevailed that the trade 'boom' in England must be at its height, and many a time we have been warned that the day has come to prepare for the inevitable reaction; but we are still making progress, and prices still go up. The pessimists lose every time. Yet while we may for some months to come hear of record figures in the Board of Trade returns, and of mills and factories working at full pressure, timber merchants must always keep an eye on the financial position; this is at the present time of the utmost importance, and it must never be forgotten that, after all, credit is the basis of modern commerce. We have seldom had a year with the bank rate at such a high level as it has been all through this summer, and, as we pointed out a week or two ago, financiers do not look upon the future as altogether free from anxiety. The effect on German trade of an unstable and restricted money market has been only too apparent, and some years ago American commerce went through a most critical period mainly because of the impossibility of traders obtaining ready money except on exorbitant terms. There is no occasion to be alarmed at the present time, and if in our own trade speculation is abandoned, and importers purchase cautiously, and only when they see a good prospect of a profit, being careful

at the same time to hold but light stocks, the period of financial stress which is expected may be tided over without any serious trouble. As far as the coming autumn and winter are concerned prospects appear bright; spot prices are established, and importers are making satisfactory profits, while the shortage of supplies and the improbability of any forcing off of balances should ensure settled conditions in the home market, at any rate until the 1914 shipments begin to come in. Each importer will know that his competitors cannot have obtained any cheap bargains enabling the 'cutting' of prices, and consequently will feel a confidence almost amounting to a certainty in fair prices being realized for all his purchases."

Wins an Original Bet

An illustration of American hustle in manufacturing and railroading was illustrated recently. Oscar E. Jacobs, president of the American Veneer & Specialty Company, Newport, Ark., and Lon L. Campbell, the company's attorney, took a motor boat trip up White river twenty-five miles above Newport, on Sunday, July 20, and stopped at a logging camp. While walking through the woods they were looking at some particularly fine trees. Campbell asked how many years before the trees would be made into furniture. Jacobs replied that he could put those trees into finished furniture stock and have them in a city 200 miles away in one week. Campbell, with a professional conception of the slow process of the law, offered to wager one hundred dollars it could not be done, which was promptly accepted.

Arrangements were made to have the particular trees cut on Monday and put on the river bank. The company's boat was ordered to the place and the logs were delivered at the company's plant at 2:30, Tuesday; were in the boiling vats at six o'clock, cut into furniture veneer on Wednesday and put into the dry kilns. On Thursday the stock was loaded bone dry into a car which left Newport via St. L. I. M. & S. fast freight Friday morning at four o'clock and was reported in St. Louis Saturday noon, July 26.

From growing red gum trees in practically a wilderness to finished veneer ready for furniture manufacture in a metropolis in less than one week is moving faster than a Mexican revolution and a creditable exploit of what American industry can do.

Valuable Trade Publication

The Bureau of Foreign and Domestic Commerce at Washington has issued two reports which should prove valuable to business men in this country who are interested in trade with foreign countries. One report shows the foreign trade of every country of the world during 1911, compared with the trade of 1910. This valuable publication shows the principal articles and their value entering into the trade of each country and the itemization of the imports from and exports to the United States. The statistics were prepared by American consular officers, and supplemented by other official data. In addition to trade statistics, the grain crops and mineral output of the principal countries are given, thus presenting in compact form the principal features upon which the commerce and industries of the foreign countries depend. The volume should prove highly valuable for reference purposes, having been revised and brought up to date so far as statistics were available. Copies of the book may be obtained free from the Superintendent of Documents, Washington, D. C., for thirty-five cents each.

The other report is more restricted in its scope, but should prove particularly valuable to lumbermen who are seeking trade with the western coast of South America.

The main part of the bulletin is a series of tables giving the freight rates on over 800 articles from inland points in the United States to inland points in Ecuador, Peru, and Chile. Freight rates per 100 pounds, in carload and less than carload lots, are given to New York from Chicago, St. Louis, Cincinnati, Indianapolis, Cleveland, Detroit, Buffalo, Pittsburgh, Boston, Providence, and Hartford; ocean freight rates per 100 pounds and per cubic foot from New York to Guayaquil, Callao, Mollendo, Antofagasta, and Valparaiso, via the Straits of Magellan and via Panama; and freight rates per 100 pounds inland from Guayaquil to Quito, Callao to Lima, Mollendo to Arequipa, and Valparaiso to Santiago.

Lighterage, transfer, and other charges at the port of New York and at South American ports are shown, together wtih the cost of marine insurance, and data are also given as to consular fees and regulations and steamship requirements. Comparative tables give the competitive rates from European ports and from New York to South America.

The Bureau of Documents sells this bulletin for ten cents.

Dynamite for Stopping Forest Fires

An unusually interesting demonstration of the value of dynamite in stopping a forest fire was made by the Dupont Powder Company at a summer meeting of the Eastern Foresters' Association on the College Forest of the New York State College of Forestry at Wanakena, N. Y. For many years it has been a problem how to stop, in an effective and rapid way, the ground fires which have done so much damage in the Adirondacks. Over large areas in the Adirondacks and Catskills the mineral soil is covered, often several feet deep, with a duff or peat which will often hold a smouldering fire for many weeks and sometimes months. A sharp fire was set by the students of the State Ranger School and in front of this advancing fire was placed a string of dynamite cartridges, which as the fire reached the line were exploded and the fire was halted as effectively as if it had reached a stream of water. The dynamite threw up vast quantities of loose soil, leaving a ditch several feet deep. A fire smouldering in heavy soil would be stopped absolutely by such a ditch and the loose material thrown up could be used to advantage as a smother for any fire that might be left burning on the ground over which the surface fire had passed. This demonstration proved that at a cost of from $10.00 to $15.00 a ditch could be formed that would stop an ordinary sub-surface fire and that placing the dynamite would not take more than twenty minutes to half an hour. Without the use of some explosive it might take several men several days to check the fire by the construction of such a ditch.

American Lumber in Greece

A recent consular report states that southern yellow pine is obtaining some foothold in Greece, where its principal use is in making boxes for exporting Zanta currants, and other fruits, as well as seed oils. The wood is shipped to Greece by way of Germany, there appearing to be no direct shipment of lumber from the United States to that country. It comes in competition with lumber from Austria, Sweden, and Turkey and fetches a higher price in Greece than the woods of other countries. The mountains and valleys of Greece grow little good timber, though the forested area is stated to contain 1,200,400 acres. Much of it is scrub growth.

Turkey Is Selling Land

The late war in the Balkans drew so heavily upon Turkey's resources that the sultan has offered valuable lands for sale for the purpose of raising money. Large tracts of forests in Asia Minor are on the market, and a deal is under way, and probably has been closed by this time, with an Italian syndicate for their purchase. Millions of acres of farm lands have also been offered for sale to the highest bidder. Contrary to general belief, forests of great value exist in the remote parts of Asiatic Turkey. The timber has never been marketed because the roads through the regions where the best forests are found, are so rough, narrow, and steep that lumber cannot be transported over them.

Forest Trees Suffering from Forest Insects

A number of reports have come to the entomologist of the College of Forestry at Syracuse of the dying of the native hickory in different parts of the state. In most cases this is due to the hickory bark beetle, which is a very small boring insect, living between the inner bark and the sap wood of the hickory. This beetle makes a burrow in which it lays its eggs and from this burrow, smaller burrows are made in all directions by the young larvae. The hickory tree, from a commercial standpoint, is doomed in New York state, unless very active work is done to prevent the spread of the insect. This can be done only by cutting the infested tree down and disposing of it in such a way as to kill all of the insects under the bark. This may be done by burning, by soaking the logs in water or by barking the trunk and burning the limbs and bark. The College of Forestry at Syracuse will be glad to have the work of insects in forest trees reported to it and it is ready at all times to determine the species and give suggestions as to combating it. Small bottle in mailing case will be sent upon request.

Hardwood News Notes

MISCELLANEOUS

J. M. English & Co. of Asheville, N. C., have removed to Yellow Creek, N. C.

The Lawton Basket Company of Lawton, Mich., has increased its capital stock to $30,000.

The Baldwin Piano Company of Cincinnati, O., has increased its capital stock to $500,000.

The Prendergast Company of Marion, Ind., has opened a branch office at Bridgeport, Ala.

The K. D. Cabinet Company has been incorporated at Richmond, Ind., with $30,000 capital.

The Nowland Furniture Company has been incorporated at Dover, Del., with $100,000 capital.

The Evansville Coffin Company of Evansville, Ind., has increased its capital stock to $50,000.

The Alabama Hardwood Company has been incorporated at New York City with $5,000 capital stock.

The Nantahala Land and Lumber Company has been incorporated at Welch, W. Va., with $4,000 capital.

The J. R. Webber Moulding Company of St. Louis, Mo., has sustained a voluntary petition in bankruptcy.

The Stadler-Robertson Furniture Company has been incorporated at Decatur, Ala., with $30,000 capital.

The Racine Lumber & Manufacturing Company of Racine, Wis., has opened a buying office at Monroe, La.

The Memphis Siding and Lumber Company has been incorporated at Memphis, Tenn., with $10,000 capital.

The Detroit Trust Company has been appointed receiver of the Michigan Buggy Company, Kalamazoo, Mich.

The K. P. Furniture Manufacturing Company has been incorporated at Cleveland, O., with a capital stock of $10,000.

The North Carolina Chair Company of North Wilkesbarre, N. C., has changed its name to the Shell Chair Company.

The Bayou Sara Lumber Company of Bayou Sara, La., has been put in the hands of Receiver E. G. Westmoreland.

J. M. Murdoch & Bro. of Johnstown, Pa., recently purchased a 40,000 acre tract of white oak timber near Milboro, Va.

The Lenker Hub Manufacturing Company has been incorporated at Leslie, Ark. The company has $15,000 capital.

The Hamilton Scale and Tank Company has been incorporated at Hamilton, O. This company has $250,000 capital stock.

The Northern Hardwood Lumber Company of Marshfield, Wis., is reported to have filed a notice of dissolution at Madison.

The Alabama Box & Lumber Company has been incorporated at Montgomery, Ala. This company has $25,000 capital stock.

The Gifford Crate Company is an incorporated concern starting business at Mancelona, Mich. This concern has $5,000 capital stock.

The Bennett Seating Company has been organized at Cincinnati, O. This company is incorporated with a capital stock of $20,000.

The Burhen Utilities Manufacturing Company is the style of a newly incorporated St. Louis, Mo., concern with $50,000 capital stock.

J. A. McLean, Jr., and J. D. McLean have been appointed receivers of the Newton McArthur Lumber Company, Elizabethtown, N. C.

The Union Lumber Company is the style of a recently incorporated concern which will operate at Parkersburg, W. Va., with $5,000 capital stock.

The Challenge Refrigerator Company has been incorporated to manufacture refrigerators at Grand Haven, Mich. The company is capitalized at $200,000.

The Flindall-Morris Company is the style of a newly incorporated concern organized to manufacture furniture at Griffin, Ind. The company has $50,000 capital.

The Clay County Land & Lumber Company has been incorporated at Pineville, Ky., with $30,000 capital. The company will develop timberland and manufacture lumber.

The Bridgeport Body Company is the style of a new incorporation recently started at Bridgeport, Conn. This concern has $150,000 capital and will manufacture auto bodies.

The McElroy-Shannon Spring Bed Company of Louisville, Ky., has been succeeded by the Leggett & Pratt Spring Bed Manufacturing Company. The headquarters of this concern are at Carthage, Mo.

It is reported that the new sawmill of Raisch & Sons of Sims, Cal., which mill has a daily capacity of 40,000 feet, will be started at once. Logs will be brought to the mill on a narrow gauge railroad.

The Nahawka Lumber Company is the style of a newly incorporated concern at Charleston, W. Va. This company has a capital stock of $25,000 and will build a sawmill with a daily capacity of 35,000 feet of hardwood lumber.

CHICAGO

F. R. Whiting of the Whiting Lumber Company, Philadelphia, Pa., spent several days of last week with the local trade.

C. L. Faust, president of the Faust Brothers Lumber Company, Paducah, Ky., was in Chicago in conference with his local manager during the early part of last week. Mr. Faust's opinion is that business is excellent.

M. L. Pease of the Galloway-Pease Lumber Company, Poplar Bluff, Mo., spent several days of last week in Chicago on business.

A. P. Goldsmith, general manager of the Radford-Portsmouth Veneer Company, Radford, Va., spent most of last week and the early days of this week on a business trip to the local market.

F. R. Gadd, vice-president of the Wisconsin Lumber Company, has just returned from a visit of several days to the company's mill which is in the course of construction at Deering, Mo. The new mill is to be modern in every respect and it is expected that it will be in operation by the first of December.

W. D. Reeves of the W. D. Reeves Lumber Company, Helena, Ark., made one of his periodic trips to the Chicago market last week on a selling expedition.

J. M. Wells, sales manager of the American Hardwood Lumber Company, St. Louis, Mo., has been spending the last two weeks in Chicago and adjoining territory.

I. A. Bushong of the Northwestern Cooperage & Lumber Company, Gladstone, Mich., spent Thursday of last week with the local trade.

D. S. Watrous, general manager of the Lansing Company's plant at Parkin, Ark., was in Chicago on Tuesday of last week en route to Parkin from the company's headquarters at Lansing, Mich.

J. H. Faust of J. H. Faust & Co., Paducah, Ky., spent several days of last week with the local trade.

D. J. Arpin of the Arpin Hardwood Lumber Company, Grand Rapids, Wis., was with the local trade for several days of last week.

The editor is in receipt of a picture postal from T. W. Fry of the Charles F. Luehrmann Hardwood Lumber Company, St. Louis, dated at Paris, August 6, in which Mr. Fry says that Paris is some town; that his nerves are on the rack all the time from the fear that he will be run over by an automobile in French. He says that the auto conjestion on the streets there is worse than in Chicago. Mr. Fry is enjoying a well-earned vacation.

The plant of C. L. Willey, the noted veneer and fancy wood manufacturer at Chicago, is running night and day on mahogany, black walnut and vermillion. Mr. Willey is at present in Europe on a buying and pleasure trip.

E. H. Klann of the E. H. Klann Lumber Company, and S. C. Bennett of the Hardwood Mills Lumber Company, Chicago, are close neighbors at Hess Lake, Newaygo, Mich., where they are finishing out their vacations, and find fishing great fun.

NEW YORK

Robert W. Higbie, hardwood manufacturer and wholesaler of New York, is mentioned among possible Fusion candidates to be named to run this fall for the office of Borough President of Queens. Mr. Higbie is active in civic affairs in the Borough of Queens where he has been a resident for many years, and the campaign now being conducted in his behalf if successful will give the people of Queens an efficient executive. Mr. Higbie is an ex-president of the National Wholesale Lumber Dealers' Association and has always been active in matters of legislation. He is also identified with many local organizations in his home borough.

J. S. Williford of the Bellgrade Lumber Company of Memphis, Tenn., was a recent visitor in New York.

H. H. Hitt, prominent hardwood manufacturer, head of the H. H. Hitt Lumber Company, Decatur, Ala., was a recent visitor to this city.

Charles Grosskurth, surviving partner in A. P. Bigelow & Co., will continue the business under the same style as heretofore. The estate of A. P. Bigelow retains its interest in the business.

H. F. Witbeck, representative of the Ferd Brenner Lumber Company of Alexandria, La., sailed from this city on the steamer Vasari, for points in South America in connection with business.

J. H. Mackelduff of the Case-Fowler Lumber Company, manufacturer of poplar at Macon, Ga., was a visitor to this city during the fortnight.

BUFFALO

W. L. Blakeslee of Blakeslee, Perrin & Darling has returned from a vacation of several weeks at Block Island. B. E. Darling is now taking a vacation and will spend it not far from the city.

Anthony Miller reports business in hardwoods as rather dull this month. The yard is not receiving much stock just now, but is well supplied with most kinds of lumber.

H. C. Mills, treasurer of Taylor & Crate, is taking a rest from lumber business and his duties as councilman and has gone on a vacation to the New England states.

The Buffalo Hardwood Lumber Company is one of the few yards to receive any stock by lake so far this season. Receipts by two recent cargoes amounted to 1,000,000 feet, chiefly of birch.

Hugh McLean found the fishing excellent on his recent trip to the Pytonga Club, on the Gatineau River, northern Canada, having caught not only big fish but many of them.

O. E. Yeager has been taking a rest from business and started about the middle of the month for a ten days' automobile trip to New York, Philadelphia and Atlantic City.

The Jerseyfield Lumber Company, which is now a Goodyear concern by purchase from former owners, is preparing to develop a large tract of timber in Herkimer county and will build a line of railroad.

F. M. Sullivan has returned from a trip east by automobile. He expects to do some hunting this fall, both on the Canadian side and in the central part of the state.

The Atlantic Lumber Company has lately largely increased its hardwood stocks here, having filled up a good share of the Scatcherd yard with various sorts of hardwoods.

The National Lumber Company states that there is a good demand for flooring at present in both oak and maple, while prices continue on a firm basis. Hardwood demand is fair.

PHILADELPHIA

Robert W. Schofield of Schofield Brothers, who has just returned from a trip to the mill at Schofield, S. C., reports the plant now running full capacity and a decided increase in volume of business during the last fortnight.

The Schofield-Lance Company, Reading, Pa., a connection of Schofield Brothers, Philadelphia, reports excellent trading. The company has a storage and shipping yard with a capacity of from 3,000,000 to 4,000,000 feet of high-grade hard and soft wood stock for immediate shipment.

H. L. Prouse of the H. L. Prouse Lumber Company, dealer in railroad lumber, ties, etc., speaks encouragingly of conditions. Railroads are buying more extensively and indications as to outlook are favorable.

Jerome H. Sheip, Incorporated, has plenty to do these days filling orders. Mr. Sheip says the crate box lumber business is in good shape, orders liberal and prices stiffening.

Ben C. Currie, the popular secretary of the Philadelphia Lumbermen's

Golf Club, has established his family and members of the firm of Currie & Campbell on a farm at Elkton, Md., where they are enjoying to the full the rustic scenery and the genuine fresh farm products. Mr. Currie finds it convenient to spend the Sundays there.

In order to better designate the character of the business, the house of Daniel B. Curll will hereafter be known as the D. B. Curll Lumber Company. Mr. Curll recently returned from a trip to his portable mills in Tennessee and is now making a tour of New York City and surrounding towns. During the last ten days he has been booking some desirable orders.

The Brown-Bates Company is not inclined to quarrel with conditions. H. E. Bates, treasurer, says there is a more healthy demand for goods at this time, with most encouraging signs as to outlook. Mr. Bates has just left for Cleveland, O., his old home, where he will enjoy a few weeks' vacation. G. W. Brown, vice-president, has just returned from a vacation spent at his old home in Saginaw, Mich.

Stroud & Wilgus are now established in their wholesale hardwood yard at Beach street and East Montgomery avenue. Mr. Stroud, who for many years was connected with W. H. Lear, is well known and very popular throughout the eastern field.

The Goodyear Lumber Company has given up its Philadelphia office, but William Hukill of this concern will continue to take care of this field with headquarters at the main office in Buffalo.

Frank J. Liebke, vice-president of the C. F. Liebke Hardwood Mill & Lumber Company, St. Louis, was a recent visitor to local trade.

Charles H. Wisler is on an extensive trip through the far West. He is keeping his many friends informed as to his whereabouts by postal cards forwarded to John H. Lank, secretary of the Lumbermen's Exchange, who sees that they are conspicuously placed for a general view. So far he has been heard from in Colorado and Utah.

Flames destroyed the box factory and lumber sheds of D. H. Davidson on Aug. 12. It is estimated that at least 150,000 to 200,000 feet of lumber and many finished boxes were burned. The loss, including machinery, etc., is thought to be about $10,000.

PITTSBURGH

G. M. Chambers, sales manager of the Kendall Lumber Company, is spending his vacation in the East. The affairs of the Kendall company were never in better shape so far as a big business is concerned than this summer.

President J. L. Lytle of the J. L. Lytle Lumber Company recently made a trip of inspection covering two weeks among the Ohio yards. He found them rather slow buyers and most of the retailers hesitating to stock up any until prices were more firmly fixed in the fall.

J. C. Linehan, formerly of the Linehan Lumber Company of this city and who has been for several months in the East, has returned to the Pressed Steel Car Company of Pittsburgh, where he has a fine position.

The Acorn Lumber Company is pushing things along all lines this summer with a firm hand and its sales of hardwoods, chiefly oak and chestnut, have been very encouraging. President H. M. Domhoff took a short vacation recently in Atlantic City.

The Morland-Ricks-McCreight Company is pretty well satisfied with the year's business to date and especially its yard trade. Very few concerns take better care of their retail customers than this company and it has a line of trade among the Pennsylvania yards which is a credit to any concern.

President J. N. Woollett of the Aberdeen Lumber Company will go South in a few days for a two weeks' business trip. He finds some tendency among manufacturers to cut prices on gum and cottonwood as they seem anxious to unload all stock possible before the increase in freight rates goes into effect this fall.

The C. P. Caughey Lumber Company has just completed a railroad in Blair county, Pa., which will help along considerably in its big hardwood operations that the company started there some months ago.

The Allegheny Lumber Company is well satisfied with the year's business to date and looks for a nice trade in hardwoods this fall.

The Shreve Chair Company, Union City, Pa., whose big plant was burned last winter, has started shipments again just five months after the fire.

The American Keg & Barrel Company of Pittsburgh which is building a big plant at Morgantown, W. Va., has recently had important changes made in the plans that will greatly increase the proposed capacity.

Joseph W. Cottrell, who has been doing business for years in the Ferguson building and is a well known member of the Pittsburgh Lumber Dealers' Association, has incorporated his business as the Joseph W. Cottrell Lumber Company. His partners in the deal will be J. Herbert Rush and R. S. Smith of this city.

W. D. Johnson, president of the American Lumber & Manufacturing Company, believes that there will be a brace in prices this fall. In hardwood he notes that quotations have been held up very firm considering the big slump in yellow pine. The American's hardwood business is much better than the average and they regard the outlook as encouraging.

BOSTON

Beckwith Brothers, manufacturers of piano legs, have sold their interests in the business to William P. Marconillier and Charles Smith of Westfield, Mass., and Florence Wheeler of Springfield. The new owners will incorporate and continue the business, which is located in Westfield.

Fire has again visited the plant of the Woodstock Lumber Company at Woodstock, N. H. A large amount of lumber was destroyed, together with trucks and small buildings, but the large mill of the company is reported saved.

Word has been received in Boston of the death of Alexander Gibson, one of the oldest lumber merchants in New Brunswick, on Aug. 14. Mr. Gibson was ninety-four years of age. For years he has carried on an extensive lumber export business.

George Whitfield Macauley, well known in Boston lumber circles, died at his home in Brookline, Mass., Aug. 15, as a result of blood poisoning. About three weeks ago Mr. Macauley tripped over a suit case, causing the injury from which he died.

The George W. Gale Lumber Company will erect a fine set of new buildings on their site in Mt. Auburn, Cambridge, Mass. Plans have already been drawn.

A very important deal, involving a large amount of timber property and mills, has just been put through in Maine. This deal involves about $525,000. The estate of the late William Engel of Bangor, Me., has sold this property to James M. McNulty, O. S. Townsend and Isaac M. Pierce, all of Bangor, Me.

Ira H. Proctor of Proctor Brothers, Nashua, N. H., died early in August at the age of seventy years. This firm is a large manufacturer of heavy barrels.

BALTIMORE

George G. L. Wood, general manager, and Clarence E. Wood, assistant general manager of the R. E. Wood Lumber Company, have gone to Bristol, Tenn., to look after the construction of a plant to be erected on a 2,500-acre tract of hardwoods purchased some time ago by R. E. Wood, president of the company, which is to be developed. A six or seven-foot band mill is to be built on the tract, and the Messrs. Wood went to the scene of the proposed operation to make the necessary preparations and decide upon some of the details. From Bristol Clarence E. Wood was going to Fontana, N. C., the scene of another one of the company's operations.

Henry C. Chipman and George H. Chipman, members of the chair manufacturing firm of George Chipman & Son, 2639 Boston street, on the 12th instant, applied for the benefit of the bankruptcy law, the application being made by them individually and as members of the firm. The individual liabilities of Henry C. Chipman were put at $238, and those of the firm at $55,099, with no assets. The Messrs. Chipman succeeded to the business conducted by their father, the late George Chipman, for a number of years, but became involved in difficulties and made an assignment some years ago.

Mrs. Anna Stockton Sloan, wife of Fisher Sloan, president of the Sloan Lumber Company, died on Aug. 17, after an illness of about eight months. She was stricken with paralysis last November and had not been in good health since. Mrs. Sloan was prominent in society when active and held in the highest esteem.

Another death of interest to the lumber trade was that of Col. George H. Dobson, who was active in the lumber trade here until about twenty years ago, but who is hardly remembered by the present generation. Colonel Dobson passed away rather suddenly on Aug. 16, while on a visit to a cousin at Mount Washington, a suburb.

The first of the so-called Bond trials in West Virginia, in which W. C. Bond, a member of the firm of Bond Brothers, extensive lumber operators in Maryland and West Virginia, is accused of arson in setting his own place afire for the insurance, came up at Keyser, W. Va., recently and attracted much attention. Jack Cramer was the defendant in the first case, it being charged that he was seen to run away from the scene of the fire immediately after it had broken out. Presumably Cramer, it is the theory of the prosecution, had been induced to set the place on fire. W. C. Bond personally is also accused, he being the defendant in the second case. He is said to be worth not less than $400,000 and is a brother of N. U. Bond, a retired capitalist of Oakland, Md. The brothers founded the town of Bond, Garrett county, Maryland, and carried on extensive operations there, finally going over into West Virginia and running mills in that state.

Mr. Buckingham, of the Kidd & Buckingham Lumber Company, dealers in hardwoods, is back after a brief vacation spent at Atlantic City.

Daniel MacLea of the Eisenhauer-MacLea Company has returned from a stay of several weeks at Ocean Grove, N. J.

COLUMBUS

L. B. Schneider, sales manager of John R. Gobey & Co., of Columbus, left recently on his annual vacation on the lakes.

Steps are being taken to have the voters of Columbus pass upon a plan of preventing floods. Consulting Engineer John W. Alvord has prepared plans and specifications which will be submitted to Mayor Karb soon. The U. S. army engineers are also working on a plan of flood preventing for the Buckeye capital.

The Knox Lumber Company of Columbus has sold to the Ford Motor

Company of Detroit a tract of land at Buckingham street and Cleveland avenue, where its lumber yards have been located. The site is to be used to erect a large assembling plant which will be a branch of the Detroit branch. Possession is to be given Oct. 25 when the Knox company will secure a new location.

H. R. Allen of the H. R. Allen Lumber Company has returned from an extended vacation trip in Michigan.

John R. Gobey of John R. Gobey & Co., has returned from an automobile trip in the East. He reports a fairly good demand for hardwoods with prices well maintained in every particular. He says the prospects for the future are good in every way.

J. A. Ford of the Imperial Lumber Company reports a good demand for many varieties of hardwoods. He says there is not a great deal of trouble with car shortage up to date.

W. L. Cortelyou of the Appalachia Lumber Company says conditions in the hardwood trade are a little quiet although prices are holding up well in every respect. Manager D. H. Maul of the company recently left on his annual vacation.

F. Everson Powell of the Powell Lumber Company says there is a fair volume of business in hardwoods with prices steady.

W. B. Sissons, sales manager of the Sowers-Leach Lumber Company, says there has been a pretty good demand during the past week or two, and the market appears to be a little stronger. Shipments are coming out promptly.

R. W. Horton, sales manager for the central division of the W. M. Ritter Lumber Company, says trade is all that could be expected for the time of the year. The volume of business is far ahead of July of this year and also ahead of August of last year.

The Pape-Glair Wood Products Company of Creston, O., has been incorporated with a capital stock of $15,000 to deal in wood products of all kinds. The incorporators are W. H. Pape, J. G. Pape, H. A. Stearns, C. G. Matteson and G. W. Coffey.

The Builders' Exchange completed the plans for its new free employment bureau and set the new department at work. Applications in all lines of the building trade will be received at the headquarters of the exchange in the Arcade building. The contractor also will make arrangements to exchange men so that the best mechanics may be at work all the time, whether the contractor with whom they have been employed has work or not.

Operation of the Ohio mechanic's lien law, enacted by the last legislature, began Aug. 5 after which date all building contracts must comply with its provisions. Local lumbermen, material dealers and credit associations are ready with the required blank forms and information regarding the law. Those organizations, together with the Builders' Exchange, have made every arrangement for providing the prospective builder with every aid in meeting the requirements of the law, and to this end pamphlets are being prepared and will be mailed, giving full advice.

For the purpose of pushing the project to give Columbus a large, modernly equipped trade school, the builders' exchange has authorized the appointment of a committee to co-operate with the board of education in the proposition to sell the Front Street School building now used as a trade school. This is said to be unfit for ordinary school purposes, to say nothing of a trade school, and its continued use is regarded as a detriment to the progress of trade education in this city. Builders' exchanges throughout the state have gone on record unanimously as indorsing the trade school idea.

TOLEDO

The Booth Column Company reports a continued good business, with the factory running full capacity to keep up with orders. The greatest call is for interior columns.

The Builders' Exchange at Dayton, O., gave its annual outing Aug. 7. It was attended by practically every member of the exchange with his family. The picnic was held at Miller's Grove, Harshmanville. The events included trap-shooting and athletic contests. A fried chicken dinner was served. William H. Crume, Andy Kemper, Charles Schaeffer, Russ Whitney, George Blanchard, and Joe Boren had charge of the arrangements for the affair.

The mill of the West Side Lumber Company of Dayton, O., recently destroyed by fire, will be rebuilt as soon as the insurance adjustment is made.

Saturday morning 2,700 lumbermen, with their families and members of the Builders' Exchange with their families, attended the annual outing at Sugar Island. The trip was made on the steamer Greyhound. There were ball games, tug-of-war and all sorts of contests. A picnic dinner was served under the shade of original forest trees, which are one of the attractions of the Island. The various lumber concerns of the city closed the doors of their industries for the day and supplied their employes with steamer tickets that they might enjoy the day without transportation expense. The affair was one of the most enjoyable ever held.

MEMPHIS

Lumber interests have not yet had to contend with any shortage of cars but they anticipate that their days of grace in this respect are somewhat limited. The cotton crop has not yet begun to move in this territory but "first bales" are being received from Arkansas and Mississippi and the movement is expected to begin assuming fair proportions in the Mississippi valley by the first of September. Officials of all the roads entering Memphis are looking for a record yield of cotton and this means that they will probably have some difficulty in taking care of this without the usual neglect of lumber and other freight, as has been the case during the fall and early winter for a number of years. All of the roads in this section with the exception of the Frisco System have increased their equipment and have taken steps to put themselves in position to render good service to shippers of all commodities, but present indications are that there will be so much cotton to move that other shippers will, in all probability, suffer their usual fate of lack of cars and slow handling of their offerings. There is much optimism over the magnificent crop prospects in the Mississippi valley and hardwood lumber interests believe that they must share in the prosperity which such a large yield of cotton foreshadows though they do not see any escape from the scarcity of cars and lack of motive power and delayed handling of shipments such as they have experienced in other years in the height of the crop moving period.

The receivers of the Frisco System have, through their attorney here, brought suit against the principal stockholders of the Russell Uniform Stave Company through which it is sought to secure release of the property on which the company has its plant. It is pointed out that the company agreed to pay a fixed monetary consideration for the use of the land and that it also agreed to ship its output over the line of the plaintiffs. It is still further asserted that, owing to inability of the stockholders to get together, the railroad is deprived of the fixed consideration in question and is likewise the loser of a large revenue which would result from the operation of a going concern.

The box factory of the Anderson-Tully Company at Vicksburg, Miss., is closed down at present for repairs but will be placed in operation again shortly. The two sawmills of the firm at that point are being operated on full time and are preparing a good supply of cottonwood to be used in the box plant. All of the box factories of the company at Memphis are running on full time and the sawmill here is also in operation at its capacity. This firm has recently doubled the output of its plant for the manufacture of three-ply gum veneers. This has been quite successful from the start and the company is finding no difficulty in disposing of its output which now amounts to about 25,000 feet per day.

R. J. Darnell, Inc., has placed the order for the new band mill which is to be erected at Batesville, Miss., to replace the one recently destroyed by fire at this point and the work of installing the new plant will be pushed as rapidly as possible. As previously stated in HARDWOOD RECORD, this firm decided to remove its band mill to Batesville in order that it might be able the more easily to develop its timberland holdings near that point. No definite statement can be given as to the time the new plant will be in actual readiness for operation.

The Kennedy Heading Company of this city is building a big circular heading mill at Hagler, near Stuttgart, Ark. The plant will be in readiness for operation about Sept. 1 and will give employment to about seventy-five men. It will be in charge of L. L. Somers. The Kennedy Heading Company operates a large heading plant in New South Memphis and has been prominently identified with the tight cooperage industry of this city and section for a number of years.

The Welch Stave Company of Memphis has recently acquired 2,600 acres of hardwood timberland near Brownsville, Ark., and is now considering plans looking to the development of the timber on this property. It is suggested that a plant will be established at a point convenient thereto.

There is considerable complaint against the Illinois Central and Yazoo & Mississippi Valley roads because of the unusual delays in making refunds on log shipments over their lines. Although officials of these roads testified in the case of May Brothers that two weeks was ample time in which to make these refunds it is pointed out that it is taking anywhere from sixty to seventy-five days to collect them. There has been considerable discussion of the matter recently and it is stated that the Southern Hardwood Traffic Bureau will take up the subject in a vigorous manner if there is not some change on the part of these roads in reference to the time required for these refunds.

John G. Meiser and H. W. Brown have purchased the yards of the Arkmo Lumber Company at Paragould, Ark. The new owners will continue operations under the name of the H. W. Brown Lumber Company.

NASHVILLE

There was a concatenation of the Order of Hoo-Hoo for the middle Tennessee District, attended by about seventy-five lumbermen. Vicegerent Charles M. Morford officiated, assisted by former Grand Scrivenoter James H. Baird. Fifteen new members were initiated. A Dutch supper was the closing feature. The concatenation brought to Nashville the largest gathering of lumbermen that has assembled here the past year.

The Tennessee Stave & Lumber Company of Scott county has been incorporated with an authorized capital stock of $500,000. J. H. Ray, J. T. Anderson, W. B. Ray, E. W. Christian, O. H. Anderson, D. W. Speek, J. M. Anderson, S. B. Anderson and S. A. Christian are incorporators.

The sawmill of Monroe Boyd at Keely, near Hopkinsville, Ky., was destroyed by fire of unknown origin, causing a loss of $1,200, with no insurance.

A. D. Bellamy, one of the largest farm wagon manufacturers in the South, died suddenly at his home at Florence, Ala.

H. H. Hitt, president of the H. H. Hitt Lumber Company, Decatur, Ala., and a party of friends passed through Nashville in a big touring automobile and will visit the eastern states and Canada before returning home.

BRISTOL

The Whaley-Peed Lumber Company was organized in Bristol last week by Irving Whaley, J. S. Ashworth and P. D. Peed. The latter is president. J. S. Ashworth is vice-president and Irving Whaley secretary-treasurer. The company will operate in eastern Kentucky and Mr. Whaley will go there to spend several months starting off the mills.

The Paxton Lumber Company reports a good volume of business. The company's mills are all running and the outlook for business is good. It has mills in Bristol, North Carolina and West Virginia.

The railroads in this section report that traffic is very good at this season of the year. The car service is largely satisfactory, despite the big demand for transportation equipment.

The R. E. Wood Lumber Company will soon start its new mill at Earhart's, five miles south of Bristol, where it has purchased a good sized boundary of hardwood timber.

The H. P. Wyman Lumber Company is operating in Lee county, Virginia, where a new mill has been installed to cut a tract of hardwood timber recently acquired.

The Pittsburgh Lumber Company is now operating on a large scale at Hampton, Tenn., near where the company has a twelve year cut of hardwood timber. The mill at Hampton is cutting about 75,000 feet of stock daily and is well supplied with logs. The stock is all sold from the Pittsburgh offices.

Irving Whaley left this week in his automobile, accompanied by his family, for Chattanooga and other southern cities to spend a few days.

H. M. Hoskins of the H. M. Hoskins Lumber Company has returned from a trip in Virginia and reports the business outlook bright. Mr. Hoskins is now cutting timber in Kentucky.

J. A. Wilkinson returned this week from a long trip into Virginia and West Virginia. As agent for several large concerns, Mr. Wilkinson is buying a large amount of stock. He has offices in Bristol and a force of inspectors on the road.

LOUISVILLE

The Louisville & Nashville Railroad having filed a formal answer to the recent complaint of local hardwood concerns against advances in rates from points north of Decatur, Ala., to Louisville and other Ohio river cities, the Interstate Commerce Commission is expected to announce a date for hearing the case shortly.

The mahogany situation is much quieter than it has been at any previous time this year, and the manufacturers, though expecting a resumption of the active demand earlier in the fall, are not being pushed for stock now as they were a short time ago. An interesting feature of the situation is that although quartered oak is in improved demand, and prices are stiffening, mahogany manufacturers profess not to credit the suggestion that the quiet condition of that wood is due to consumers having turned from it, on account of its advanced prices, to oak.

Edward S. Shippen, president of the Louisville Point Lumber Company, recently returned from the Southwest, where he looked over timber and sawmill conditions generally. The company is understood to be considering locating a mill in that section, but has made no definite arrangements.

The complaint filed by Maley & Wertz of Evansville, Ind., with the Interstate Commerce Commission, in which the commission is asked to require the road to institute more practicable methods of regulating milling in transit, is of interest locally because the same rules apply here as at Evansville. While some of the manufacturers are making reports to the Southern Weighing & Inspection Bureau regularly and getting their refunds without difficulty, others say that they are having all kinds of trouble and that they would like to see the situation radically changed.

Friends of W. P. Brown, the veteran hardwood man, who has now retired from the rapidly growing business of the W. P. Brown & Sons Lumber Company, noted with pleasure that his health is very much improved compared with a few months ago. He was in Louisville recently and looked hale and hearty, and visited several of his old friends in the business.

The state board of forestry has approved plans which have been made by State Forester J. E. Barton for the establishment of a patrol system in Eastern Kentucky for the protection of the woods from fire during the dry season, and the appointment of wardens will now proceed. Mr. Barton also has a plan in mind for securing the co-operation of the boy scouts, of whom there are several thousand in the state. He believes that if they could be interested in protecting the forests much good would result.

The Cloverport (Ky.) Boat & Machine Company will purchase machinery for its woodworking department, an entirely new plant being planned by General Manager William Pate.

F. L. Clore & Son, of Henderson, Ky., who became financially embarrassed as the result of an effort to develop a timber proposition at Fayette, Ala., have assigned for the benefit of their creditors to the Ohio

Saline River Hardwood Co.

Main Sales Office

Pine Bluff, Arkansas

Manufacturers of

Genuine Forked-Leaf White Oak

Red and Sap Gum
Red Oak and Ash

¶ We offer to the trade a remarkably SUPERIOR lumber product.

¶ Our TIMBER is virgin forest growth of the highest type.

¶ Our MILLS are new and produce accurately manufactured stock.

¶ Our LUMBER is all KRAETZER-CURED—treated with steam under pressure directly from the saw—insuring quick drying to light weight, freedom from seasoning defects and stick-marking, splits and stain.

¶ Kraetzer-cured lumber will "stay where you put it."

¶ Dry kiln and oak flooring plant in connection.

¶ We solicit the inquiries and orders of critical and discriminating buyers.

¶ For straight cars of Yellow Pine, or mixed cars with Oak Flooring, write LONG-BELL LUMBER COMPANY, Kansas City, Mo.

On the Following Stock We Will Make Special Prices for Prompt Shipment:

82,000′ 2″ No. 2 Common Poplar.
10,000′ 1¼″ No. 1 & 2 Qtd. Poplar.
20,000′ 1x24″ & up No. 1 and Panel Poplar
40,000′ 3″ No. 1 & 2 Poplar
15,000′ 4″ x 18 to 30″ No. 1 & Panel Poplar
30,000′ 4″ x 7 to 25″ No. 1 & 2 Poplar
35,000′ 5/8 x 18″ & up No. 1 & Panel Poplar
117,000′ 6 4 S. W. & No. 2 Common Chestnut
38,000′ 1 x 12″ & up No. 1 & 2 Chestnut
58,000′ 1″ No. 1 Com. Chestnut
47,000′ 5/4 No. 1 Com. Chestnut
58,000′ 6/4 No. 1 Com. Chestnut
36,000′ 8/4 No. 1 Com. Chestnut
28,000′ 4/4 No. 1 & 2 Com. Chestnut
41,000′ 5/4 No. 1 & 2 Com. Chestnut
69,000′ 6/4 No. 1 & 2 Com. Chestnut
12,000′ 6/4 No. 1 & 2 Red Birch
19,000′ 8/4 No. 1 & 2 Red Birch
86,000′ 3″ No. 1 & 2 Red Birch
6,000′ 4″ No. 1 & 2 Red Birch
21,000′ 5/4 No. 1 & 2 Cherry
10,000′ 8/4 No. 1 & 2 Cherry
88,000′ 4/4 No. 1 Common Cherry
19,000′ 5/4 No. 1 Common Cherry
10,000′ 8/4 No. 1 Common Cherry

The Atlantic Lumber Co.

70 Kilby Street, Boston, Mass.

The Tegge Lumber Co.

High Grade
Northern and Southern
Hardwoods and Mahogany

Specialties

OAK, MAPLE, CYPRESS, POPLAR

Milwaukee, Wisconsin

Mahogany and Circassian Lumber & Veneers

¶ The largest assortment of finest figured Mahogany Logs, Lumber and Veneers in the country can be found at the Chicago plant of C. L. Willey.

¶ We are just in receipt of fifteen cars of remarkably superior Circassian Walnut Logs, large size, well-figured and of good color, which are now being cut into Veneers.

¶ A visit or correspondence from discriminating buyers of all varieties of fine Imported and Domestic Cabinet Woods in Lumber and Veneer is solicited.

¶ You will not only find the Willey warehouses well stocked with a superb collection of Circassian, Mahogany, Vermilion, Black Walnut and other fancy foreign and domestic lumber and veneers, but buyers are assured of prompt and painstaking service, and a quality of product not usually obtainable.

¶ To visit the plant take Blue Island Ave. car at the postoffice to Robey Street.

C. L. WILLEY, Chicago

Largest Fancy Wood Veneer and Lumber producing plant in the world

Valley Banking & Trust Company of Henderson. F. L. Clore, head of the firm, died recently, Shirley Clore, his son, being in charge of the business.

Van Norman of Hines & Norman, Louisville, attorneys for the Paducah Board of Trade, who filed with the Interstate Commerce Commission a complaint charging that lumber rates into and out of Paducah are out of line with those into and out of Cairo, stated that the report that the complaint had been withdrawn is erroneous. Some of the carriers in CFA territory have agreed to change class rates into Southern Illinois from Paducah, but no change has been made in the lumber rate situation, and the complaint will accordingly be pressed.

ARKANSAS

The plant of the Marianna Heading Company of Marianna, Ark., which was partially destroyed by fire some two weeks ago, has been rebuilt and is now running on full time. The company is now operating with two shifts, running night and day, to make up for the time lost while shut down. Officers of the company say the demand is daily increasing, and they anticipate a heavy fall business.

The Arkansas Land and Lumber Company of Malvern, Ark., is now constructing a stave mill to take care of the oak timber on its holdings.

The handle factory owned by Sallee Brothers of Pocahontas, Ark., which was destroyed by fire a few weeks ago, has again resumed operations. The output of the factory has been doubled and the number of employes increased.

A charter has recently been granted to the Lonker Hub and Manufacturing Company of Leslie, Ark. The capital stock of the new company is placed at $15,000. W. S. Mays is president, G. W. Mays, vice-president; E. O. Mays, secretary, and Buck Mays, treasurer.

The Shelby Cooperage Company, which formerly had its plant at Portland, Ark., has begun operations in West Helena.

The St. Louis Cooperage Company has again resumed operations at its plant in Brinkley, Ark. This plant has been closed down for several weeks, during which time extensive improvements and repairs, including the installation of additional machinery, were made.

The Kentark Land and Lumber Company, which has recently filed a copy of its articles of incorporation with the secretary of state of Arkansas, is preparing to open up its Arkansas offices at Pine Bluff. The company proposes to use $150,000 of its capital stock in this state. A few weeks ago this company bought 24,350 acres of hardwood timberland in Lonoke and Jefferson counties, Arkansas, and announced its plans for building a big plant on its holdings between Stuttgart and England, Ark. The new company also bought some weeks ago a controlling interest in the Varner Land and Lumber Company, which owns 13,000 acres of hardwood timberland in and around Gerdge, Ark., and operates a big mill at that place.

MILWAUKEE

Work on the factory building of the Universal Furniture Company is expected to be started within a short time. The $4,000 subscribed by local business men is being called for, which indicates that preliminary work is well under way. President Walter R. Frame of the Business Men's Club is active in pushing the project.

The Millard Manufacturing Company of Gladwin, Mich., will locate in Appleton, according to plans now under way. With the assistance of the Commercial Club, representatives of the Millard company are looking for a site. A new factory will undoubtedly be erected to house the institution. The chief output of the plant will be racked hoops, hoop timber and articles in that line.

A model hydroplane, built of the finest mahogany wood, has been completed at the boat factory of Dan Kidney & Son, at De Pere. The model was put on exhibition at the Perry Centennial and Home Coming Exposition at Green Bay. A working model is being completed and will be tried out shortly.

Several carloads of large timber, cut on the Thornapple river, near the famous John Dietz farm at Cameron dam, have just been shipped from Winter, Wis., to Liverpool, England. The timber is of enormous size, being about fifty feet long and ten inches square at the top. The scarcity of such timber brought a very high price. It will be used in shipbuilding.

J. P. Hanson of Oshkosh, a pioneer mill architect, inventor of several labor-saving logging devices, including a log loader, log conveyor and a belt tightener, died at his home in Oshkosh of appendicitis, after a short illness.

Charles Fireharmer, aged seventy-two years, one of the oldest residents of Horicon, a prominent lumberman and in late years interested in many building projects, died suddenly of heart failure while working in the vicinity of his lumber yards. He was a native of Germany, coming to this country as a young man. He engaged in sawmilling near Herman, later coming to Wausau and then to Horicon. He engaged in lumbering in Horicon, later being succeeded by his son William. Besides his widow, seven children survive him.

The Barrett Manufacturing Company, a New York roofing corporation, with $4,870,000 capital stock, has filed a statement with the secretary of state to do business in Wisconsin. The interest in this state is $20,000.

The Wilbur Lumber Company, with yards in this state and Illinois,

is improving the large yards and grounds of the West Allis branch. The big shed, 140 by 320 feet in size, on National avenue, is being reroofed, the offices have been equipped with water and sewer, and the grounds fixed up to harmonize with the new asphalt pavement and cement sidewalks surrounding them.

The Shawano Land & Lumber Company of Shawano has been incorporated with $30,000 capital stock. F. W. Humphrey, Charles Magee and August Anderson are named as incorporators.

The W. L. Scott Lumber Company, a New York corporation with a capital of $115,000, has filed a statement with the secretary of state to do business in Wisconsin. The concern has $5,000 invested in this state.

For the second time within a month fire broke out in the H. A. Schwartzburg box factory, 517 North avenue, Milwaukee, and partially destroyed the plant. The more recent fire started in the train building, a long two-story frame structure, and spread to the wings. The loss amounts to about $25,000. The H. A. Schwartzburg Estate, owners and operators of the factory, announced to the trade immediately after the fire that the plant was partially destroyed and that arrangements had been made with the Mueller & Son Company to take care of the present and future orders until the plant is rebuilt. Mueller & Son Company are giving temporary employment to all the employes of the Schwartzburg factory.

August Freymuth, New London, manufacturer of tubs and other woodenware, has filed a voluntary petition in bankruptcy in the United States District Court in Milwaukee. He lists his liabilities at $5,058.70 and his assets at $10,250.27, of which $3,050 are claimed exempt.

John Tolfree of West Branch, Mich., and M. P. Gale, Saginaw, president and vice-president, respectively, of the Diamond Lumber Company of Green Bay, spent a few days visiting the mill and plant on business.

F. H. Parker, president and treasurer of the Mueller & Son Company, Milwaukee box manufacturers, with his wife and daughter, have returned home from a six weeks' motor tour through the East and Canada.

J. R. Harrington, formerly engaged in the manufacturing business at Crandon, has returned from Helena, Ark., where he had been managing a large woodworking plant. Mr. Harrington will re-engage in the business in this state as his wife was unable to stand the southern climate.

Robert Hall, well known in the northern lumbering circles and for the last few years engaged in the lumber contracting business at Laurium, died at his home in that city, aged sixty years. He had been ill for a short time, but his death was unexpected. Mr. Hall was a native of Canada, coming to this country forty-six years ago and settling in Maine. For many years he was foreman of the John Bagley lumbering interests in Osceola. Later he was identified with northern Michigan lumbering contractors and until his death was engaged in the contracting business for himself. His widow, three sons and two daughters survive him.

J. S. Chase, aged fifty-nine, a former resident of De Pere and for years prominent in the lumbering industry in that vicinity, died suddenly in Anacortes, Wash., where he had been engaged in the lumbering business for the past three years. Mr. Chase was a native of Michigan, coming to De Pere at an early age with his parents. With his father he conducted a sawmill at St. Mathews, later called Chase. He succeeded his father after the latter's death. Later he bought the Milton Persons Lumber Company at De Pere, then a sawmill at Pembine, and later the Johann planing mill. In 1910 he left for Anacortes, where he operated a shingle and siding mill. He leaves a widow and three children.

John Eller, aged sixty-one, prominent in lumbering circles of Milwaukee, died at his home in this city Monday, Aug. 11. Mr. Eller was engaged in lumbering for twenty-five years and was president of the John Eller Lumber Company. He had been in poor health for several months. Mr. Eller was born in Germany and came here twenty-five years ago. His widow, two daughters, Misses Bertha and Gretchen Eller; and two sons, George F., secretary-treasurer of the lumber company, and Stephen H. Eller, vice-president of the concern, survive him.

The Mason mill, which was erected way back in the eighties and was at one time the biggest mill in northern Wisconsin, is to be dismantled at the end of this season. For years the mill ran night and day and summer and winter. Now that the Hines interests, which own the mill at present, will finish their sawing by the end of the present season the mill is to be dismantled. With the burning of the Iron River mill a few weeks ago and the determination of the Hines people not to rebuild, it will mean that two big industries will vanish from the lumbering section near Ashland. There are about 15,000,000 feet of logs at the Iron River mill to be sawed. These will be taken to West Duluth. The passing of the mill at Mason will mean much to that town which will now be only a farming town.

DETROIT

Secretary John Lodge of the Dwight Lumber Company says that although this is a rather dull season, business with his company has been at least five per cent better than it was for the corresponding period a year ago. The company's hardwood flooring mill is working full time and there is a fair volume of orders and inquiries. Mr. Lodge reports also that prices on all hardwoods are holding up and that he does not expect any decline.

William Brownlee of the Brownlee Company predicts that during the coming year the Detroit automobile industry will use larger quantities of hardwood lumber than ever before. He also said that prospects are favorable to a busy fall and winter trade as indications are that building operations will be brisk, although the market is rather dull at present because it is between seasons.

Messrs. Lowrie and Robinson of the Lowrie & Robinson Lumber Com-

Bluestone Land & Lumber Company
MANUFACTURERS
WEST VIRGINIA HARDWOODS
Soft White Pine, Oak, Poplar, Chestnut, Hemlock
Band Sawed Stock
MILL FACILITIES COMPLETE PLANING
RIDGWAY PENNSYLVANIA

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E. Sondheimer Co.
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RED GUM
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All Grades and Thicknesses
We make a specialty of mixed cars of Sap and Red Gum, One-half to Two inches thick.

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Manufacturers Southern Hardwoods
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Manufacturers
plain and quartered red and white oak, ash, gum and poplar.
ALSO FULLY EQUIPT DIMENSION PLANT
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Latest Improved Dry-kilns & Machinery

BEAUTIFUL SANITARY Y DURABLE

Triangle Brand White Oak Flooring

Perfectly dried and worked

Made from our own timber from one boundary, insuring uniform color and texture; manufactured at our newly installed hardwood flooring plant.

Our Specialty: Quarter-sawed White Oak Flooring
Thicknesses: 3/8" and 13/16" Standard Widths
QUICK SHIPMENTS GUARANTEED

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MANUFACTURERS
POPLAR, PLAIN AND QUARTERED OAK, RED AND SAP GUM, ASH, CHESTNUT, BASSWOOD, HEMLOCK, WHITE PINE

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WANTED
All Kinds of High-Grade
HARDWOODS
S. E. SLAYMAKER & CO.
Representing
WEST VIRGINIA SPRUCE LUMBER CO.,
Cass, West Virginia.
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AT HALF PRICE
STEAM SKIDDER AND LOADER COMBINED
Clyde Modern Equipment. Used about sixty days. Operations discontinued. No further use for it
For Particulars Write
GOGEBIC LUMBER CO.
GRAND RAPIDS, MICH.

pany attended the convention of the Knights Templar at Denver last week.

Thomas Forman of the Thomas Forman Company says that while his factory is busy now he expects increased business in September. Mr. Forman said that the company's mill at Heidelberg, Ky., is now turning out 55,000 feet a day of maple and oak and that labor conditions are now very satisfactory. He is very optimistic regarding the hardwood market during the next few months.

Dodge Brothers, manufacturers of automobile parts, announced that they will about the first of the year begin manufacturing automobiles on a large scale and that they will erect large buildings. This announcement was of especial interest to Detroit hardwood dealers because it means the enlarging of the hardwood market. Dodge Brothers will undoubtedly become large buyers of hardwoods.

The Grigg-Hanna Company, the Yeomans Diver Company and the Kuehl-Butcher Lumber Company, all box manufacturers, report fair business.

GRAND RAPIDS

Jas. F. McSweyn, president and manager of the Memphis Band Mill Company, Memphis, Tenn., is spending a few days at his old home here on business and pleasure, and his son, George McSweyn, will be here this week on a short visit. Otis A. Felger of this city is secretary and treasurer of the company, which is operating its southern mill night and day, cutting a million feet a month. The timber manufactured is largely oak, the white oak being quarter sawed and the red sawed plain.

A. L. Dennis of the A. L. Dennis Salt and Lumber Company and the Dennis Canadian Company is spending a few days at Dighton, Mich., where the two mills are now cutting hardwood, maple, beech and birch. The Dennis Canadian Company is operating with three band mill and resaw at Whitney, Ont., and is cutting mostly birch.

W. R. Smith, manager of the Stearns Company, who is on an extended vacation trip to the Pacific coast, accompanied by Mrs. Smith, is expected home about Sept. 1 and will then take an eastern trip. His work here is being looked after by Arthur M. Manning.

Zeno H. Nelson of Jackson & Tindle will return in a few days from Canada, where the company is putting in a mill.

Douglas Sinclair of the Valley City Lumber Company, Ltd., has returned from near Munising, where the company is cutting hardwood.

Fred I. Nichols of the Nichols & Cox Lumber Company and G. von Platen, who has extensive mill interests at Iron Mountain, are enjoying trips abroad this summer.

Fred A. Diggins of Cadillac is in Chicago for medical treatment.

Grand Rapids contractors have been awarded the job of erecting an office building for the Hanchett Swage Works at Big Rapids. The structure will be 42x42 feet, two stories and brick, steel and reinforced concrete will be used.

Thomas B. Wyman of Munising, secretary-forester of the Northern Forest Protective Association, in a report covering the period from June 15 to Aug. 1, says there have been twenty fires, affecting approximately 2,600 acres, largely slash lands. The railroads caused seven of these fires and Mr. Wyman states that nearly all operating locomotives are devoid of efficient spark arresters.

The Hardwood Market

CHICAGO

Nothing figures in the local market prominently except the continued increase in the number of inquiries, which does not necessarily mean that at present the increase in orders is marked, as the buying trade is evidently continuing upon the same policy which it has been following for several months, that is, buying for immediate wants. The increase in inquiry is taken to mean an indication that stocks at consumers factories are in a low condition. Hence this interest is considered an encouraging feature to fall trade, regarding which the majority of local hardwood men predict marked activity.

No particularly notable recessions in market values are evident locally, but on the other hand prices are continuing to remain in a fairly firm condition, although not of as high a level as prevailed before the quiet tone began. Taken altogether, considering both the buyers and the sellers of hardwood products in the Chicago market, a conservative tone prevails, both factors seeming to prefer playing a waiting game to assuming any kind of a panicky state of mind.

NEW YORK

The hardwood market in New York shows a little better tone and some improvement in demand. While there has been no very great increase in volume the renewed activity which is promised with the passing of the torrid season seems very likely to materialize. It will not require a boom to give the market some real color, and the buying of the past two months has been of such character as to assure a steady flow of trade at good prices when business opens in the fall. There have been no

material price changes and the demand has been spread over the list so that each kind has had its share. Oak, ash, maple and birch are still the leaders.

BUFFALO

There is a fair amount of mixed-car business in hardwoods this month, but large orders are lacking, as is usually the case in August. Prospects are considered good for renewed business next month, although nobody is looking for any brisk situation until after the tariff bill is enacted into law. July business was favorable at most yards and the present month makes a fair comparison with the same month last year.

Plain oak remains as the wood most in demand, although maple has been making a good showing with some dealers. Other hardwoods are moving rather slowly, brown ash being in a little better sale than it is in some seasons. Yards are getting in very little stock, but assortments are already in pretty good shape.

PHILADELPHIA

For the warm season, when more or less business apathy might be expected, conditions continue about normal. During the last fortnight inquiries have increased and although not all of them result in orders it indicates an initiative interest of the buyer in the market and augurs a healthy tone in the hardwood situation. Buying in New York and New England has been comparatively active but on a conservative basis, and prices, with a few exceptions, have been well sustained. Furniture manufacturers continue fairly busy, with outlook encouraging; box factories manage to keep plants running full capacity and building work in large cities, although not up to expectation, shows an advance during the last few months over the same period of last year. Money continues tight and there is a tendency on the part of the money lenders to avoid building ventures, at least for this season, to prevent the flooding of the real estate market with empty houses. In large construction work, however, there has been a strong activity throughout the summer.

Hardwoods vary but little from old positions. Oak is the leader; ash, chestnut, basswood, maple, gum, birch and beech hold firm places. Taking the situation as a whole, the hardwood market is more than holding its own and the outlook for fall trading is very promising.

PITTSBURGH

Hardwood wholesalers here are fairly well satisfied with present conditions. There has been quite a little slump in general demand since June. For midsummer, however, business is keeping up pretty well especially as regards prices. Factory hardwoods are in much better demand than last summer. The big end of the business now being done is in mixed hardwoods largely for the mining companies whose operations are on a much larger scale than last year. It is thought that yard buying, which is now very much in the dumps, will resume in good form in September in order that the retailers may be able to supply contractors with finishing lumber on buildings started late in the season.

BOSTON

There has been little change in the market for hardwood lumber during the past two weeks. The fall trade should be starting up in an active way before long, but so far as we can see there is no buying movement on. The average buyer is not willing to pay asking prices and cannot be induced to anticipate his wants at this time. The majority of wholesale merchants in Boston admit that demand is mostly confined to immediate wants, which are not large. Consuming manufacturers in this section of the country are operating their plants moderately and do not appear to be making changes toward increasing production right away. There may be some weak spots in the market, but it is safe to say these cannot be found where desirable grades of hardwood lumber are concerned. The millmen are very firm and anticipate a demand large enough to take care of their offerings. If a buyer is not willing to pay the price asked there are no inducements offered by the manufacturer to bring about a sale.

The market for plain and quartered oak is as firm as it has been at any time during the past few months. Ash has been selling in a fair way at firm prices. Cypress has held steady for some time, but demand is not large.

BALTIMORE

While it does not appear that the hardwood trade has made decided headway, the statement can also be made that the situation is quite satisfactory as to movement and prices. To be sure, a measure of quiet prevails, but this is expected at the present time, when many of the buyers of hardwoods are out of town taking vacations, and when other factors are at work to retard the distribution. It is also to be said that the general business situation has not yet sufficiently clarified to remove all restrictive factors. The currency bill, for instance, is yet to be gotten out of the way; in fact, the opposition to the measure in its present form has become so pronounced that it would not be strange if some important modifications were made. The tariff bill is outlined with sufficient distinctness to indicate what the country must expect, but there is yet enough doubt to interfere to some extent with the trade movement.

In view of these conditions the distribution of hardwoods may be said to have attained a gratifying volume, with the yards interested to a greater extent than might have been supposed and with values not so much lower as to indicate real weakness in any division of the trade. To be sure, the export movement is far from satisfactory, because of the congestion that prevails on the other side, which encourages the foreign buyers to insist upon price concessions, in lieu of which rejections and other means of cutting down the returns are resorted to. It is also to be said that the mills have so gained on the demand as to make the offerings rather liberal in certain items, such as chestnut. Sound wormy is about where it stood before the advance of last spring, with lower grades of poplar in very liberal supply and extra wide stocks rather

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easier too than they had been not so long ago. The offerings of wagon oak planks in various foreign trade centers are still so heavy that prices are depressed, and the shippers stand a chance of coming out of transactions minus a profit. Low grades of poplar are also very plentiful and the foreign buyers take advantage of conditions to hold back. But with the Balkan war over and other disturbing factors abroad removed, it is at least a reasonable supposition that a better feeling may assert itself before long.

The domestic yards are showing more interest in offerings than might be supposed in the face of the rather liberal holdings. It is to be said, also, that when a buyer wants lumber he will not haggle over the price. The production is somewhat reduced because of scarcity of labor, many of the negroes in the southern mills being away at camp meetings or other gatherings. August is a month of vacation taking and the mill hands insist upon having their recreation. It is altogether likely, therefore, that the production will fall behind the normal and that no important additions to the available supplies will be made for the present. This may be expected to correct in a measure whatever halting tendency may have developed of late, although it is to be said that many of the hardwood men report the continuance of an active distribution.

COLUMBUS

Hardwood trade in Columbus and central Ohio has been fairly active during the past fortnight. Most of the manufacturers and shippers report that the volume of business is all that could be expected for the time of the year and that the prospects for the future are bright. Taking it all in all the tone of the market is good, and no marked weakness of any sort has appeared.

Building operations still continue active in every way. Reports from the smaller towns of central Ohio show a good volume of building, and the same is true of the larger cities. This means quite a demand for certain hardwoods and is one of the chief features in maintaining the market. The stocks of dealers and in the hands of manufacturing concerns are light. Both are good purchasers and trade is about evenly divided between the two. Dry stocks in the hands of mills are not large. Shipments are coming out fairly promptly although some complaints of car shortage have been made. Factories making furniture are buying stocks now, and implement and vehicle concerns are also good buyers.

Oak, both quarter-sawed and plain, is in good demand. Prices are strong and no attempt is made at shading quotations. Chestnut is also strong, especially sound wormy. There is a good demand for all grades of poplar. Automobile factories are buying the wide sizes. Ash and basswood are moving well. Other hardwoods are unchanged.

CINCINNATI

All immediate danger to crops which were becoming badly damaged on account of the continued dry spell in this vicinity has passed. A welcome break in the hot spell was broken by rain the latter part of last week and there has been rain almost daily ever since. The effect upon all vegetation is remarkable and the rains coming just in the nick of time should carry the crops through. Reports from surrounding farming districts show a fair yield at this time and prospects for a good-sized corn crop are promising.

There is very little business in the city proper, due to the teamsters' strike, but a revival is expected soon, as the strike seems to be broken and resumption will take place gradually. Shipping has been only fair, most of the old orders being pretty well cleaned up and new business has been only in small quantity orders, many of them for mixed cars. Prices remain firm. Judging from numerous inquiries covering many items and the known shortage of lumber in the hands of most of the large consumers, it is only reasonable to suppose that good business will come with early fall. While conditions are not right by any means for good business prospects, many lumbermen from personal observation report indications all point to a much improved trade in the fall.

There is little change in the poplar situation. In spite of a light demand, except for low grades, prices are held firm. Stocks in the hands of both manufacturer and wholesaler are large and prospects are none too good for a movement in upper grades, although wide stock improves a little.

TOLEDO

There has been but little change in the hardwood situation and there are still plenty of buyers for the right grade of lumber. Toledo dealers are not anxious for poor materials but are in the market right along for the proper grade of lumber. It has been difficult throughout this season to get desirable stocks which have been responsible for small orders more than anything else. Oak continues a leader with ash and hickory in good demand. Considerable lumber is being called for by the building trades as the private residence game is still on full blast in Toledo. The class of homes being constructed here are of good quality and the greater share of these homes call for hardwoods for interior finish and flooring. Factory consumption is normal. Low-grade boxing continues firm at advanced prices and there is a noticeable stiffening in the prices of the better grade stuff. The car situation in Toledo is good and thus far no shortage has been noticeable, although complaints have been coming in of traffic difficulties at other points.

NASHVILLE

No new developments are noted in the hardwood market. A fair demand is mentioned by shippers for oak, low grades of poplar, chestnut, ash and other hardwoods. Prices show no material change. Oak flooring concerns have been making important shipments. Inquiries being received from manufacturers cause shippers to predict renewal of business on more active scale by fall.

BRISTOL

Bristol lumbermen report that business continues good, considering the season of the year. Trade has been comparatively brisk during summer and improvement is expected with the coming of the fall season. Prices are in the main satisfactory but further advances are expected. The outlook is considered most encouraging.

LOUISVILLE

Market conditions are regarded by hardwood men as generally satisfactory. The demand has shown signs of improvement, and in fact most of the leading operators state that orders have been received in satisfactory volume. Prospects for fall business have been improved by the recent beneficial rains which have fallen over many parts of the country, making it appear that the damage to crops, which has been made much of will be minimized. With the production of spring wheat and cotton fixed at bumper totals, the country can stand a small contraction of the corn crop without much difficulty lumbermen believe.

Quartered oak is one of the most active items at present, with prices holding up well. Plain oak is in good demand, the common grades moving more freely than good, and inch being in much better call, relatively, than thicker stock. Ash is also selling well. Poplar has shown some improvement lately, but is still generally quiet. Chestnut is very slow just now, though sound wormy is selling well on account of the increased activities of the panel makers. Red gum is holding its own. Cottonwood is steady, and is being bought in considerable quantities by the box manufacturers.

MILWAUKEE

Signs of the coming fall revival are evident in the local hardwood market. Actual orders are increasing, while inquiries regarding prices and stocks are arriving from all sources. The outlook is especially good and wholesale lumbermen are confident that business will be above the average mark this fall. Building operations in this city are considerably ahead of a year ago, while reports from the smaller cities and towns about the state indicate unusual activity in the building field. During the first half of August there were 165 permits issued in Milwaukee for structures aggregating in cost $541,150. During the corresponding period a year ago there were 195 permits granted, representing an investment of only $417,643.

The crop situation is unusually favorable, which ought to give assurance of a busy building season this fall. Threshing is well under way all over Wisconsin and the yield of small grain is fully up to normal, with the exception of barley. The barley production this season is falling off, due to the smaller acreage and to a slight decrease in the yield. The hot weather and extensive rains have resulted in a wonderful growth of corn and predictions are being made that a bumper crop will be harvested. The Wisconsin crop report for August, recently issued by the state board of agriculture, is highly satisfactory.

Prices for all lines of hardwood are being well maintained and this fact has tended to make buyers go carefully about placing orders, but they are gradually coming to the point where they are convinced that lower quotations cannot be expected. Stocks at most of the hardwood consuming plants are light and it will be necessary for these concerns to place larger orders from now on. The supply of northern hardwoods is light, with the demand improving for birch, maple and basswood. Plain oak is still the best seller in the southern woods.

Reports from the northern lumber companies say that the mills are meeting with a steadily increasing demand for hardwoods. Many orders are being placed and the shipping movement is becoming more active daily. It is said that several large producing concerns are weeks behind on their orders. The sash and door concerns are seeking prices on birch and maple and are beginning to order more heavily from the mills. Demand seems to be good at the mills for ash, while crating elm is in brisk demand. The call for basswood is not quite so strong.

DETROIT

Conditions in the Detroit hardwood market the past fortnight have been rather quiet. Prices continue high and steady on most grades of hardwoods, the only decline being in hemlock and this only a slight decrease. The flooring trade is fairly busy and the factories have been working full time. Indications are that the automobile industry will require during the next year larger quantities of hardwoods than ever before. Prospects, too, are extremely favorable to a big building boom in Detroit this fall, winter and spring and hardwood men are all optimistic regarding future business. The box trade is fairly lively, but the box men are complaining because of the continued high prices of hardwoods.

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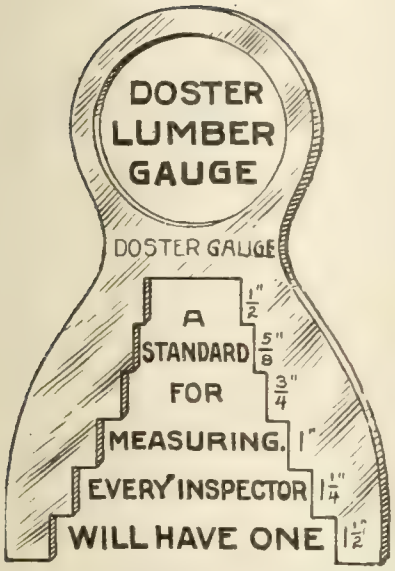
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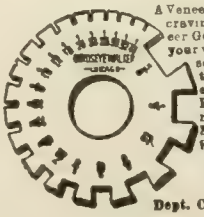
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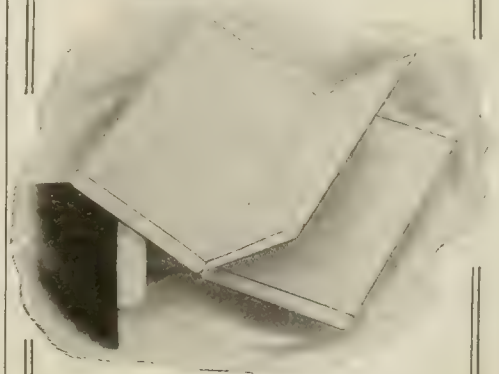
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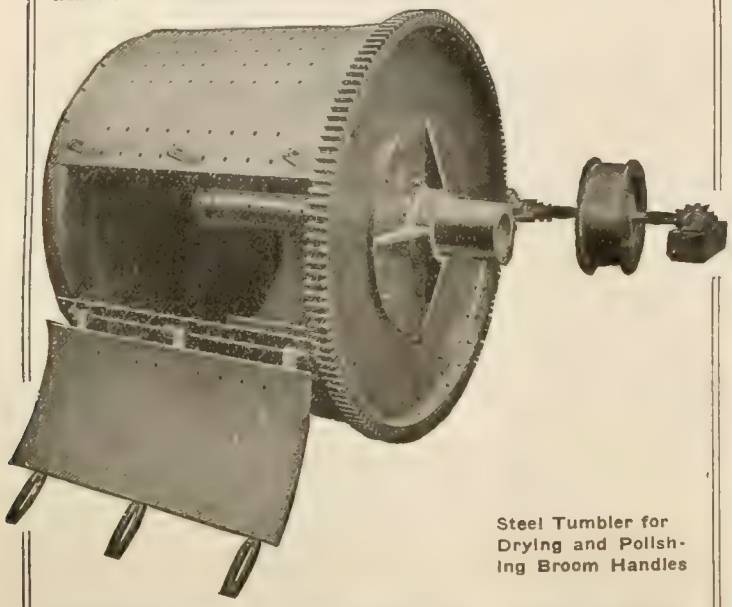
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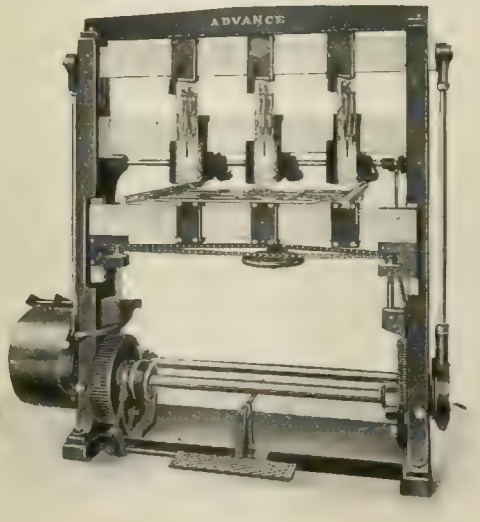
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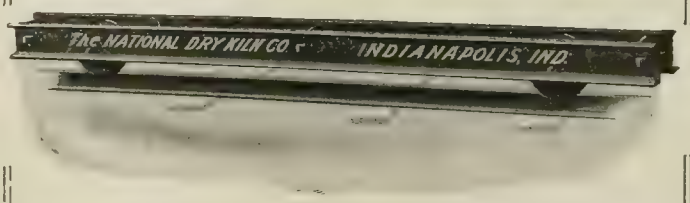
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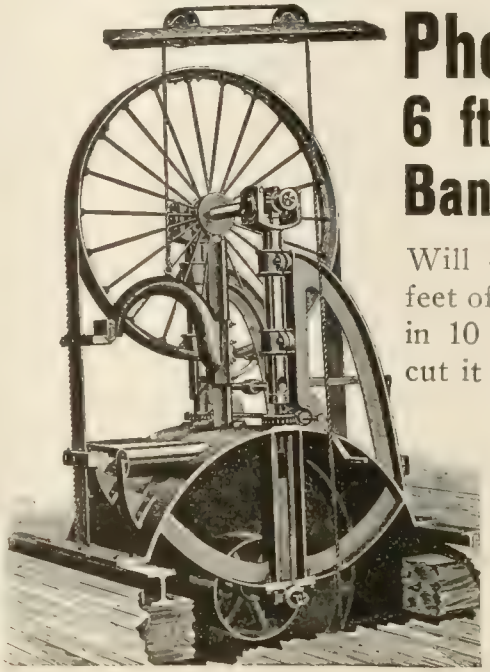
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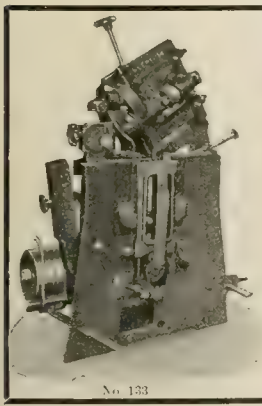
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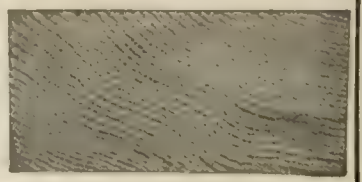


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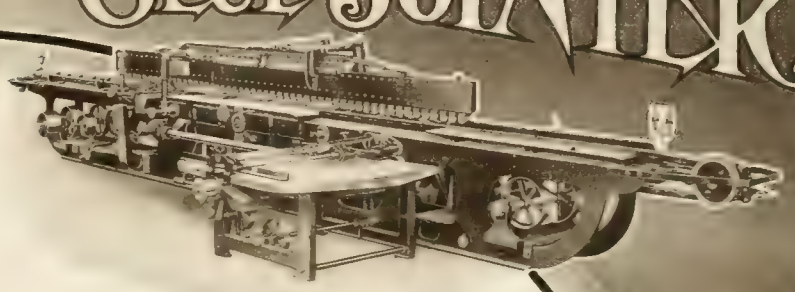
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The Linderman Automatic Dovetail Glue Jointer



Rips, Joints, Glues, Clamps and Sizes at one operation

In the course of two years there has been a great change in producing glue joints. It's no longer necessary to use a large amount of space for jointer, gluing, clamps and edging or sizing saws. The complete jointing, that is, building the panel up to its finished width from the cut-off saw when defects are taken out, can be done on one machine, the "Linderman" Automatic Dovetail Glue Jointer, without inconvenience, by one automatic operation and panels made with

The Taper Wedge Joint
The Dependable Joint

which can be relied upon to produce the best solid furniture in oak, mahogany, gum, walnut, maple and all other kinds of wood, because it is doing this in many furniture factories at the present time.

This method of jointing lumber automatically offers a good many advantages over hand methods, because it reduces labor, lumber and glue costs. A good many features that are of great value to the furniture manufacturer will be found in this automatic method of making glue joints automatically.

Send for our new catalog just off the press. It illustrates the advantages in every detail.

Linderman Machine Co.
MUSKEGON, MICHIGAN

New York City. Woodstock, Ont. Atlanta, Ga.
St. Louis, Mo.

Impossible to do business without the Linderman

W. C. HELLER & CO.
Established 1891 Incorporated 1899

W. C. HELLER, Pres.
E. G. HELLER, Treas.

Linderman Machine Co.,
Muskegon, Mich.

Gentlemen: Referring to your favor of the 30th, would say it is impossible for us to do business without our Linderman Machine.

After our fire we installed two continuous Jointers and an extra supply of clamps, figuring we could take care of our business until the Linderman reached us, but we find even with these two machines we cannot possibly get the results.

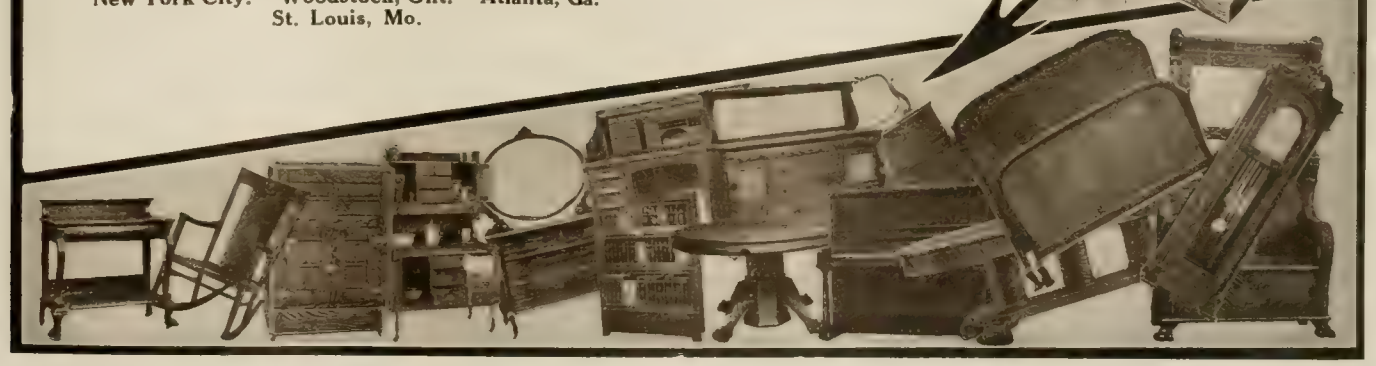
We are looking every day for the machine and all of our men are patiently waiting for it.

Before our fire we had a three months' record which we intended to send you, but unfortunately all this data was destroyed in the fire.

As to the quantity of work we do not believe the ordinary wood worker would hardly believe our figures, however, we are going to make this machine pay for itself within twelve months after it is installed.

Yours very truly,

W. C. HELLER & CO.



Vansant, Kitchen & Company

Manufacturers Old-Fashioned Soft Yellow Poplar

5-8 and 4-4 in Wide Stock, Specialty

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

OUR specialty in Poplar, Ash and Maple is cutting to order special thicknesses and widths. Our facilities and high quality of our timber enable us to do this to your entire satisfaction. Thick specialties we can make to your advantage,—High grade Car Sign Boards in Poplar we give special attention to,—

4/4 16″ and wider, high grade Maple No. 1 Common & Better usually in stock,—Three cars ready for shipment now,—And also always have on hand a nice stock of Hemlock Boards in all grades,—

WE SOLICIT THE BUSINESS OF DISCRIMINATING BUYERS FOR ALL HIGH GRADE SMOKY MOUNTAIN HARDWOODS AND HEMLOCK

LITTLE RIVER LUMBER COMPANY **Townsend, Tenn.**

W. H. White Company
Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.
Sales Office: BUFFALO, N. Y.

STOCK DRY—STANDARD GRADES—BEST MANUFACTURE—CAR OR CARGO SHIPMENTS

WE OFFER
All Kinds
OF
Hardwood and Hemlock
Lumber
Hardwood
Flooring, Lath
AND
Dimension Stock

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED

POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD



SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Hardwood Record

Eighteenth Year.
Semi-Monthly.

CHICAGO, SEPTEMBER 10, 1913

Subscription $2.
Single Copies, 10 Cents.



ADVERTISERS' CLASSIFIED DIRECTORY FOLLOWS READING MATTER.

Gentlemen:

We sell Lumber, especially Hardwoods.

We manufacture almost all we sell—we are first hands.

Our delivery points are scattered and prompt shipments our aim. Get in touch. We'll do you good.

J. Gibson McIlvain & Co.
1420 Chestnut Street, Philadelphia

For Quick Shipment

5 cars 4 4″ 1s & 2s Q. W. O.
3 cars 4 4″ No. 1 Com. Q. W. O.
3 cars 4 4″ Clear Q. W. O. Strips, 4 to 5½″.
1 car 4 4″ Clear Q. W. O. Strips, 2½ to 3½″.
½ car 4 4″ Clear Q. W. O. Strips, 1½ to 2″.
4 cars 4/4″ 1s & 2s Plain W. O.
3 cars 4 4″ No. 1 Com. Plain W. O.
4 cars 4 4″ Com. & Bet. Q. R. O.
2 cars 4 4″ 1s & 2s Plain R. O.
7 cars 4 4″ No. 1 Com. Plain R. O.
2 cars 4 4″ No. 2 Com. Plain R. O.
2 cars 5 4″ 1s & 2s Plain R. O.
1 car 5 4″ No. 1 Com. Plain R. O.
4 cars 3 4″ 1s & 2s Plain R. O.
5 cars 4 4″ 1s & 2s Plain Red Gum.
7 cars 4 4″ No. 1 Com. Plain Red Gum.
3 cars 4 4″ 1s & 2s Qtd. Red Gum.
1 car 4 4″ No. 1 Com. Qtd. Red Gum.
2 cars 5 4″ 1s & 2s Qtd. Red Gum.
1 car 5 8″ 1s & 2s Plain Red Gum.
4 cars 4 4″ 1s & 2s Sap Gum.
3 cars 3 4″ 1s & 2s Sap Gum.
3 cars 4 4″ 1s & 2s Cottonwood, 6″ to 18″.
1 car 4 4″ 1s & 2s Cottonwood, 13″ and up.
8 cars 4 4″ Cottonwood Box Boards, 13 to 17″.
2 cars 4 4″ Cottonwood Box Boards, 9 to 12″.
2 cars 4 4″ Cottonwood Box Boards, 9 to 10″.
7 cars 4 4″ No. 1 Com. Cottonwood.

Immediate Attention to All Inquiries

Memphis Band Mill Company
Memphis, Tenn.

Cartier-Holland Lumber Company

DON'T OVERLOOK THIS BET!

We wish to call your attention to the following high grade lumber. Same is in nice shipping condition, and especially adapted for high grade furniture or interior finish work.

30,000′ 4 4 End Dried Winter Cut White Maple
40,000′ 4/4 High Grade No. 1 Common and Better Birch
40,000′ 5/4 High Grade No. 1 Common and Better Birch
100,000′ 4 4 1sts and 2nds Soft Elm
150,000′ 1x4″ Pine Crating Strips S2S
50,000′ 1x4 & Wdr. Pine Crating (85% 6″ & Wider)

WE WOULD APPRECIATE YOUR INQUIRIES

Ludington Michigan

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

BASSWOOD

We Offer for Prompt Shipment

1 x 4 Clear Strips	150 M
1 x 6 1's and 2's	200 M
1 x 7 and 8″ 1's and 2's	34 M
1 x 3 No. 1 Common	25 M
1 x 4 No. 1 Common	50 M
1 x 5 No. 1 Common	32 M
1 x6 No. 1 Common	148 M
1 x7 and up No. 1 Common	26 M
4/4 No. 1 Common	65 M

Sept. 7, 1913

COBBS & MITCHELL, Inc.

Sales Department

CADILLAC MICH.

Mitchell Brothers Co.

Dry Stock List

MICHIGAN HARDWOODS

Cadillac, Mich. Sept. 7, 1913

1x7 & 8 Basswood, 1s & 2s	50 M
1x4 Basswood, Clear	13 M
1x4 Basswood, No. 1 Common	11 M
1x6 Basswood, No. 1 Common (part dry)	19 M
4/4 Birch, 1s & 2s (part dry)	17 M
4/4 Birch, No. 3 Common (part dry)	33 M
4/4 Cadillac Gray Elm 1s & 2s	96 M
4/4 Cadillac Gray Elm, No. 1 Common	100 M
4/4 Cadillac Gray Elm, No. 2 Common	81 M
4/4 Cadillac Gray Elm, No. 3 Common	28 M
4/4 Rock Elm, No. 2 Common & Better	7 M
4/4 Soft Maple No. 2 Com. & Bet. (part dry)	18 M
4/4 Soft Maple, No. 3 Com	4 M
4/4 White Maple, end dried (clear)	14 M
4/4 Birdseye Maple 1s & 2s, end dried	1½ M

CADILLAC QUALITY

When you want lumber of Cadillac Quality, Lumber which has been manufactured and seasoned properly, and grades which have not been blended to meet price competition—send us your inquiries.

WE SELL ONLY MITCHELL'S MAKE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

30,000 ft.	6/4 No. 1 C. & B. Basswood
50,000 ft.	5/4 1st & 2nds Basswood.
75,000 ft.	5/4 No. 2 C. & B. Birch
20,000 ft.	6/4 No. 2 C. & B. Birch
100,000 ft.	6/4 No. 2 C. & B. Beech
40,000 ft.	8/4 No. 2 C. & B. Beech

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



Ready for Shipment

Ten cars
4/4 No. 1 Common & Better Birch

Five cars
6/4 No. 1 Common & Better Birch

Two cars
8/4 No. 1 Common & Better Birch

Two cars
4/4 No. 2 Common & Better Ash

Three cars
4/4 No. 1 Common & Better Soft Elm

Five cars
4/4 No. 2 Com. & Better Basswood

Above cut from virgin timber. Grade and manufacture are first class.

Mears - Slayton Lumber Co.
1237 Belmont Ave. Chicago, Ill.

CIRCASSIAN

It costs money to match the usual run of Circassian walnut in paneling because of its inherent defects; hence

If you secure the right figure and widths in clear stock you are just that much ahead, aren't you? We are fortunate in just having secured this rare combination in an especially selected shipment of veneer.

In sincerity we can say that we never saw a closer, richer figure or more completely figured stock. Its clearness and width are astonishing.

ASK US TO GIVE YOU DETAILS

VENEER MANUFACTURERS COMPANY
CHICAGO ILLINOIS

FLANNER-STEGER LAND & LUMBER CO.
MAPLE AND BIRCH FLOORING

of unexcelled manufacture and quality. Also Manufacturers of Basswood, Birch, Elm, Maple and Hemlock.

SEND US YOUR INQUIRIES

MILLS:
BLACKWELL, WISCONSIN

GENERAL SALES OFFICE
1704 STEGER BLDG., CHICAGO, ILL.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

J. RAYNER
VENEERED PANELS
ALL WOODS
SEND FOR STOCK LIST
MAHOGANY LUMBER
CARROLL AVE. AND SHELDON ST.
CHICAGO

Estabrook-Skeele Lumber Co.
MANUFACTURERS AND DEALERS IN
Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods
In the Market for Round Lots of Hardwood
WRITE US BEFORE SELLING
Fisher Building, - - - CHICAGO
'PHONE HARRISON 1984

We plead "GUILTY"—Our present facilities will not supply all the panels our increasing trade calls for, but we are not sacrificing quality in order to increase output.

We are making a specialty of door and wainscot PANELS, 3/8", 5/16", 1/4": Plain and Quartered Oak, Birch, Yellow Pine, and Mahogany.

Also Stile and Rail veneers in these woods, cut to your widths; 1/8", 3/16", 1/4". And, 1/28", 1/24", 1/20", 1/16", wide veneer for panel faces in Oak, Circassian Walnut, Mahogany, and Birch.

Core veneer and crossbanding.

LUMBER—

Mexican, Honduras, East India, Prima Vera, and Cuban Mahogany. Tenn. or Red Cedar. All thicknesses.

HUDDLESTON-MARSH LUMBER CO.
2254 Lumber Street, Chicago, Ill.

15,000,000 Feet Always On Hand



Our Double Band Mill
Huttig, Ark.

With two mills like this we manufacture 40,000,000 feet of band sawn southern hardwoods annually. We guarantee our lumber to be of excellent widths, full thickness, and to contain 50% to 75% of 14′ and 16′ lengths. We make high grades and all of the "CREAM" is in each grade. Send us your inquiries.

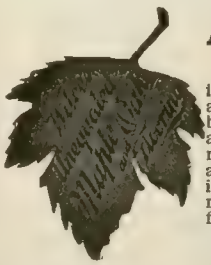
"Wislumbco Standards"

25,000 " 8 4 Log Run Hickory
30,000 " 4 4 x 13" & Wider 1st & 2nd Tupelo
40,000 " 4 4 No. 1 Common Red Gum
50,000 ft. 4 4 1st & 2nd Red Gum
50,000 " 4/4 x 13 to 17" Box Board Sap Gum
50,000 " 4 4 x 13" & Wider 1st & 2nd Sap Gum
50,000 " 6/4 Log Run Soft Maple
60,000 " 4/4 No. 1 Common Cypress
60,000 " 4/4 No. 2 Common Sap Gum
65,000 " 4 4 x 6 to 12" 1st & 2nd Tupelo
75,000 " 4 4 x 13 to 17" Box Board Tupelo
75,000 " 4/4 x 6 to 12" 1st & 2nd Sap Gum
75,000 " 4/4 No. 1 Common Sap Gum
75,000 " 4 4 Shop Cypress
100,000 Pcs. 1¼x1¼ 19" Oak Squares

A good stock of Oak, Gum, Cypress, Cottonwood, Elm and Maple

Wisconsin Lumber Co.
CHICAGO

MILLS
Huttig, Ark.
Deering, Mo.



A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company
22nd and Throop Sts. CHICAGO, ILL.

Hayden & Westcott Lumber Co.
SPECIAL RAILROAD DEPT.
Hardwoods :: Softwoods
823 Railway Exchange Building, Chicago, Ill.

For items of Hardwood Stock or Hardwood Machinery, you will find it advantageous to write our advertisers. Get in touch!

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO.

KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK

OUR SPECIALTY

MANUFACTURERS OF

QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER

BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

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J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS

HARDWOODS AND PINE

POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:
Bank and McLean Ave., Cincinnati — I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:

WHITE OAK—Plain or Quartered.

RED OAK—Plain or Quartered.

CHESTNUT — BASSWOOD

POPLAR — WHITE PINE

Always carry large well assorted stock of all kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR, OAK, CHESTNUT, WHITE AND YELLOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

"THE VERY BEST"

ASH, BUCKEYE,
RED BIRCH, CHESTNUT, GUM,
RED OAK, WHITE OAK, PINE,
POPLAR and WALNUT

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

Kimball & Kopcke

Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

CINCINNATI
THE GATEWAY OF THE SOUTH

L. W. RADINA & CO.
DEALERS IN
POPLAR AND HARDWOODS
CINCINNATI : : OHIO

Lest You Forget
and
You probably don't know that we are now
Manufacturing in White and Red Plain and Quarter-Sawed **OAK**
3/8, 1/2, 5/8, 3/4, 4/4, 5/4 — 100,000 Feet per Day
EXPORT AND DOMESTIC
BENNETT & WITTE
MEMPHIS, TENN.
NEW ORLEANS, LA. CINCINNATI, O.
CABLE ADDRESS, ALL OFFICES, "BENNETT"

W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.
The W. E. Heyser Lumber Company
MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio
BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky
12,000,000 ft. High Grade West Virginia and Southern Hardwoods in stock at all times.
Shipments made direct from our own yards and mills in straight or mixed cars.
SEND US YOUR INQUIRIES

Are You Satisfied *With the Oak You Are Getting?*
IS IT SOFT IN TEXTURE?
IS IT EVEN COLORED?
IS IT WELL FIGURED?
If it isn't, you are not getting it from US.
Our stock is Band sawn and can't be beat.
Give us a chance to ship you a sample car.
The Mowbray & Robinson Co., Cincinnati Ohio
MANUFACTURERS OF
PLAIN AND QUARTER-SAWN OAK AND POPLAR
MILLS
Quicksand, Ky.
West Irvine, Ky.
Viper, Ky.
MAIN OFFICE
CINCINNATI, OHIO
YARDS
Cincinnati, O.
Detroit, Mich.
Rochester, N. Y.
Brooklyn, N. Y.

The Maley, Thompson & Moffett Co.
Veneers, Mahogany and Hardwood Lumber
Largest Stocks Best Selections
CINCINNATI, OHIO

If you want to reach the wholesale consumers of hardwood lumber throughout the United States, a HARDWOOD RECORD advertisement will do it for you.

If you want to reach the hardwood manufacturers of the United States, a HARDWOOD RECORD advertisement will do it for you.

The HARDWOOD RECORD represents high-class, special, class circulation, with a minimum of waste circulation.

Ask any HARDWOOD RECORD advertiser for experience on results.

LAMB-FISH LUMBER CO.

MEMBER HARDWOOD MANUFACTURERS ASSOCIATION OF THE U.S. — A Guarantee of a Square Deal in both Grade and Measurement

Band Mill and General Offices

CHARLESTON, MISS.

THE LARGEST HARDWOOD MILL IN THE WORLD—ANNUAL CAPACITY 40,000,000

We Produce

Kraetzer-cured LUMBER

STOCK LIST—Dry Lumber on Hand September 1st, 1913

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	10/4	12/4	16/4
FAS Qtd. Wh. Oak	20,000	30,000	18,000	30,000	50,000	8,000	6,000				
FAS Qtd. Wh. Oak, 10" & up					16,000						
FAS Qtd. Wh. Oak Strips					15,000						
No. 1 Com. Qtd. Wh. Oak		12,000	15,000	15,000	160,000	2,000	2,000				
No. 1 Com. Qtd. Wh. Oak					15,000						
No. 2 Com. Qtd. Wh. Oak					25,000						
FAS Pl. Wh. Oak	30,000	30,000	25,000	20,000	200,000	6,000	5,000	5,000			
No. 1 Com. Pl. Wh. Oak	20,000	20,000	25,000	30,000	100,000	15,000	20,000	20,000			
FAS Pl. Red Oak			30,000	25,000	300,000	40,000	12,000				
No. 1 Com. Pl. Red Oak			20,000	18,000	400,000	12,000	12,000	3,000			
Oak Core Stock					200,000						
Com. & Btr. Qtd. Red Gum					20,000	13,000	12,500	12,500			
FAS Pl. Red Gum	300,000	200,000	200,000	300,000	350,000	200,000	180,000	50,000	12,000	10,000	3,000
No. 1 Com. Pl. Red Gum	80,000	60,000	60,000	100,000	300,000	40,000	20,000	15,000			
FAS Highly Fig. Red Gum	25,000	20,000	15,000	20,000	12,000	5,000	4,000	3,000			
FAS Sap Gum, 13-17"			5,000	20,000	75,000	6,000					
FAS Sap Gum, 13" & Up, Stained					30,000						
FAS Sap Gum, 18" & Up					20,000						
FAS Sap Gum, 6" & Up	30,000	25,000	20,000	30,000	200,000	20,000	15,000	18,000	12,000	12,000	
Sap Gum Box Boards, 13-17"					75,000						
Sap Gum Box Boards, 8-12"					25,000						
No. 1 Com. Sap Gum, 4" & Up	35,000	30,000	25,000	40,000	50,000	40,000	16,000				
No. 2 Com. Sap Gum, 3" & Up	60,000	120,000	60,000	80,000	200,000	40,000	30,000				
Shop & Better Cypress					200,000		250,000				

*Can be shipped inside of sixty days—balance of stock ready for immediate shipment.

This is a special grade suitable for veneering over. This stock is bone dry and we are in position to make some attractive prices on same.

All of our Red and Sap Gum, No. 1 Common and Better, is Kraetzer Cured, which is a guarantee that the lumber is properly cured, absolutely straight, free of stain and check; it comes out of this process uniform in color and of a soft, mild texture. We are prepared to kiln-dry any of the above stock and have Planing Mill facilities for dressing. Oak timbers and planking a specialty.

GOOD GRADES "STEARNS QUALITY LUDINGTON" PROMPT SERVICE

HARDWOOD SPECIALISTS

LAST CALL
for Winter Sawn End Dried White Maple

Only a limited amount of this stock on hand, so cover your present and future requirements before the supply is exhausted.

Lower Peninsula Hard Rock Maple



END DRYING LUMBER SCIENTIFICALLY

Stock on Hand

65 M 4/4 FAS.
36 M 5/4 FAS.
48 M 6/4 FAS.
55 M 8/4 FAS.
83 M 4/4 No. 1 Com.
26 M 5/4 No. 1 Com.
32 M 6/4 No. 1 Com.
35 M 8/4 No. 1 Com.

The STEARNS SALT & LUMBER CO. LUDINGTON, MICH.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

Our Specialties:

Cottonwood—Red and Sap Gum **Oak** (Plain and Quartered Red and White) **Three Ply Red Gum Panels**

A Few Items We Want To Move

10 cars 4 4″ x 13″ to 17″ Cottonwood Box Boards.
12 cars 4/4″ x 13″ to 17″ 1sts & 2nds Cottonwood.
7 cars 4/4″ x 18″ to 21″ 1sts & 2nds Cottonwood.
5 cars 5/4″ x 6″ to 12″ 1sts & 2nds Cottonwood.
4 cars 3/8″ x 6″ & Up 1sts & 2nds Sap Gum.
1 car 1/2″ x 6″ & Up 1sts & 2nds Sap Gum.
4 cars 5/8″ x 6″ & Up 1sts & 2nds Sap Gum.
3 cars 3/4″ x 6″ & Up 1sts & 2nds Sap Gum.
6 cars 4/4″ x 6″ & Up 1sts & 2nds Sap Gum.
7 cars 4/4″ x 13″ to 15″ 1sts & 2nds Sap Gum.
1 car 5/4″ x 6″ & Up 1sts & 2nds Sap Gum.
3 cars 6/4″ x 6″ & Up 1sts & 2nds Sap Gum.
2 cars 3/8″ x 6″ & Up 1sts & 2nds Red Gum.
2 cars 1/2″ x 6″ & Up 1sts & 2nds Red Gum.
2 cars 5/8″ x 6″ & Up 1sts & 2nds Red Gum.
3 cars 3/4″ x 6″ & Up 1sts & 2nds Red Gum.
7 cars 4/4″ x 6″ & Up 1sts & 2nds Red Gum.
5 cars 6/4″ Log Run Soft Maple.
1 car 5/8″ 1sts & 2nds Plain Red Oak.
4 cars 3/4″ 1sts & 2nds Plain Red Oak.
5 cars 4/4″ 1sts & 2nds Plain Red Oak.
6 cars 5 8″ No. 1 Common Plain Red Oak.
3 cars 3 4″ No. 1 Common Plain Red Oak.
1 car 4 4″ 1sts & 2nds Qtd. White Oak (flooded stock).
1 car 5 4″ 1sts & 2nds Red Gum (flooded stock).
2 cars 5 4″ No. 1 Common Red Gum (flooded stock).

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY

Memphis **BOX SHOOKS and VENEERS** **Tenn.**

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Farris Hardwood Lumber Co.

Successors to
CHEROKEE LUMBER COMPANY

Manufacturers Hardwood Lumber

NASHVILLE TENNESSEE

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AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

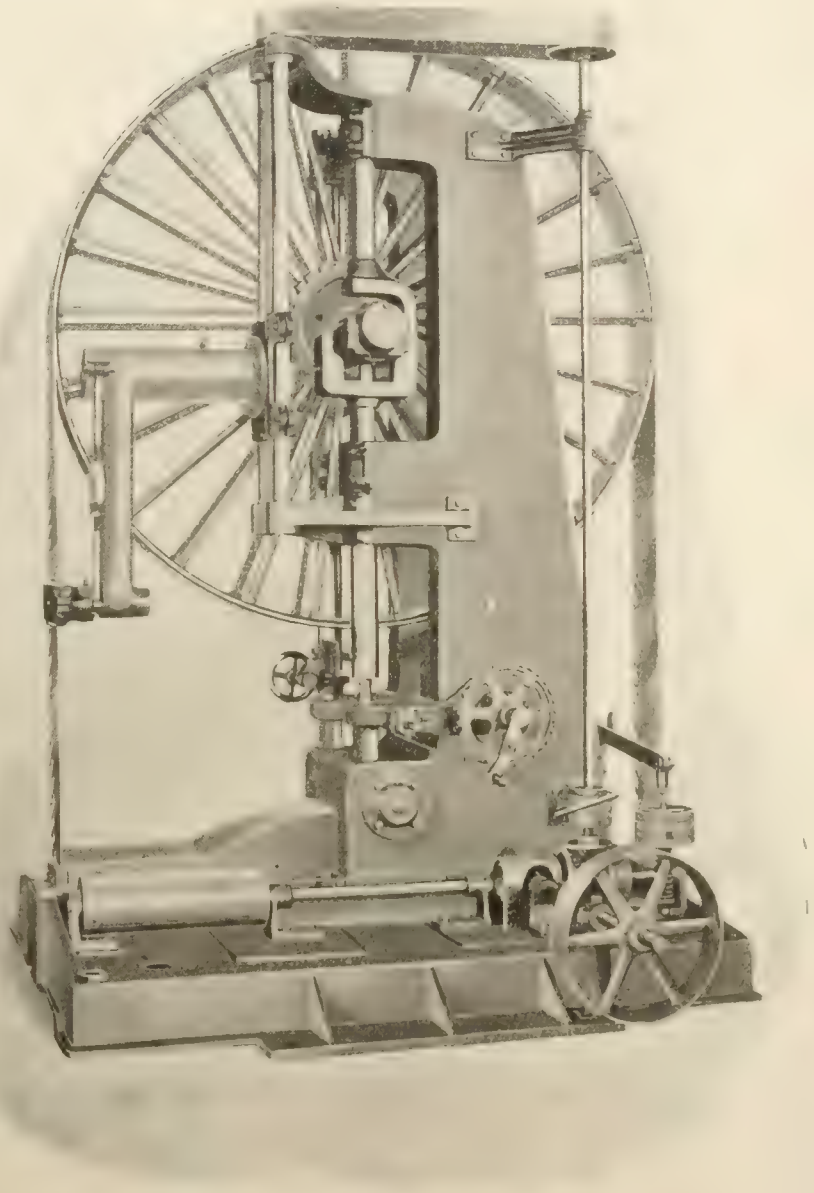
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6/4 and 10/4 1s & 2s Hickory.
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We have been building band mills for thirty-five years and this New Hoosier Band Saw Mill represents the experience of these years.

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We build this mill in three sizes, 6, 7 and 8 ft. The widest saw the 6 ft. mill will carry is 10″; the 7 and 8 ft. mills will carry 10, 11 or 12″ saws. This mill is built in a substantial manner and embodies all that is latest and best in Band Mill design. The base is of the heavy extension pattern and is so constructed that it does not overhang the foundation but extends completely around the mill. By means of the construction of the column the upper wheel runs in the center of the mill and is supported both above and below the mandrel. The bearings are long and are chain oiling.

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The 6 ft. mill will split a 48″ log and lay down a 30″ board between saw and column; the 7 ft. will split a 54″ log and lay down a 36″ board, the 8 ft. will split a 57″ log and lay down a 42″ board.

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2 cars 4/4 1sts and 2nds plain red oak.
2 cars 4/4 1sts and 2nds plain white oak.
1 car 8/4 1sts and 2nds plain red oak.
1 car 4/4 1sts and 2nds quartered white oak.
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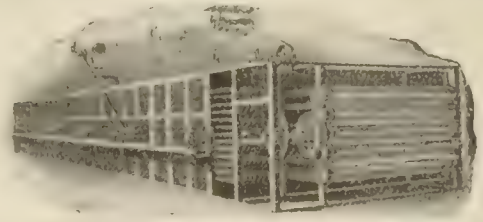
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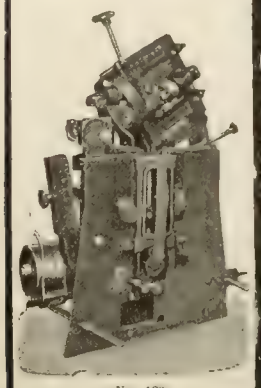
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Hardwood Record



Published in the Interest of the American Hardwood Forests, the Products thereof, and Logging, Saw Mill and Wood-Working Machinery, on the 10th and 25th of each Month, by

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Review and Outlook

General Market Conditions

AS A GENERAL PROPOSITION reports from the country over indicate that hardwood sales are in fair volume. There seems to be but a moderate quantity of large orders being placed, and the trade is made up of a multitude of small requisitions.

The wood leading the demand is plain sawed white and red oak, but there is scarcely a variety of hardwood lumber to be named that is not in fair call, and is moving with comparative freedom.

There is no accumulation of dry stock of any variety of hardwoods in either the North or South. In the south-country during the last sixty days it is possible that the output of green stock has not been quite counterbalanced by shipments. However, shipments of hardwoods in the North are in excess of output. There is certainly no accumulation of hardwoods of any varieties in any part of the country, save possibly in red gum and cottonwood, which stocks are a little in excess of ninety days ago.

There is still an insistent call for mahogany, Circassian, vermillion and other fancy foreign hardwoods in the furniture and kindred trades. The majority of manufacturers of foreign woods are behind in their orders. Stocks of available logs are very moderate, and hence it is doubtful if enough will be obtainable this fall to take care of the demand. While prices on these woods are firm, there is no manifestation of any marked increase in price, which would naturally be the result of this situation.

The veneer and panel people with few exceptions are loaded up with orders and some of the plants are running over-time. It is alleged that prices in veneers and panels have been strengthened to a considerable extent during the last few months, and that this line of trade is now showing a fair profit on investment.

Sales in both oak and maple flooring are from fair to strong, and practically all the factories are running full time. There is no apparent increase in maple flooring production, but new factories which have been installed during the year on oak flooring will produce a considerable volume of this material.

There is the usual evidence of an impending car shortage which is nearly always true at crop-moving periods. Wise buyers should anticipate their hardwood requirements as much in advance as possible.

On the whole, the general hardwood situation is good and certainly manufacturers are not going to have any surplus of dry stock to carry over the winter. The general situation can be epitomized as very healthful.

Birch Has Made Good

A CLEAR CUT, SENSIBLE CAMPAIGN is being carried on by the Northern Hemlock and Hardwood Manufacturers' Association, with headquarters at Wausau, Wis., for the purpose of acquainting the people of this country with the good qualities of wood as a building and manufacturing material. The latest exhibit is a collection of ten specimens of birch, each one in a different finish, and accompanied by an explanation of the method of imparting the finish. These handsome finishes are cherry spartan stain, spartan walnut stain, Circassian walnut stain, spartan green stain, fumed oak acid stain, mahogany stain, pearl green, birch stain, white enamel, and Mission brown.

The list shows birch's range of uses, though by no means the full range. It is a wood that responds to the skill of the finisher. With it he can embody his ideas in concrete forms and put them before the people. There was a time when birch suffered because of unreasonable prejudice, just as other good woods have suffered. It was not understood. People thought it could not be successfully seasoned. The prejudice has passed, the misunderstanding has been removed. Birch can be easily and perfectly seasoned, and long use has demonstrated that it stands well after being seasoned, the joints hold, it takes and retains finish, it is strong, stiff, durable, and reliable, and last but not least, it is a very handsome wood.

The tastes of the American people are being cultivated in the uses of woods. They are much more critical than they once were, but at the same time they are quicker in recognizing merit, and more appreciative of good qualities. Birch appeals to people of that kind. It has the qualify and the reputation, and there is no question but that it will hold all the ground it has gained and will gain more. The ease and success with which it can be finished in imitation of other valuable woods greatly enlarges the field of its usefulness.

Lumber Output in 1912

THE PRELIMINARY LUMBER CUT of the United States for 1912 is shown in a report issued by the Bureau of Census, and is published in full in this issue of HARDWOOD RECORD. This publication is four months earlier than the similar report was issued last year, and it is a subject for congratulation. Heretofore the excellent material contained in these annual reports had lost some of its value, or at least some of its interest, by the long delay in its publication. Lumbermen felt that the figures were too old by the time they were made public. The promptness with which the 1912 statistics are given out has forestalled criticism of that kind, and the Bureau of the Census is to be commended for its promptness and efficiency in handling this matter. The report is preliminary, and more complete figures will come later. That which will follow, however, will relate largely to labor and wages and will be of more interest to economists and statisticians than to active lumbermen.

A number of facts given in the report are worth careful consideration. It appears that more than half of the whole lumber output

of the United States is now produced in the South. Another important matter which might escape notice on first reading, is the showing made by Ohio, Indiana, and Illinois. Those highly developed agricultural states are actually increasing their output of lumber. They passed the point years ago where they were properly regarded as lumber regions; yet they have gone on producing lumber in large amounts, and the later figures show a slight increase. Some small tracts of original forest remain in those states and are being drawn upon by the mills, but there can be no question that most of the present cut comes from woodlot timber that has made its chief growth since the region was settled. That seems to imply that those states are now growing timber as fast as it is being cut. If that conclusion is correct, they can maintain their present lumber output—about 1,000,000,000 feet annually—for all time.

Their woodlots are valuable and are being protected from fire and other injury, and a conservative estimate will place the yearly growth of wood at 300 feet, board measure, for each acre. An aggregate wooded area of 3,500,000 acres suffices to produce a yearly cost of 1,000,000,000 feet. That is the end and aim of forestry, and apparently Ohio, Indiana, and Illinois are getting close to it. To maintain the present production of lumber they will need to keep only one acre in woods to twenty-five in farm crops and other uses. To increase the output of lumber it would be necessary to increase the wooded area, or improve the condition of existing woodlots. Those states ought to have one acre in woods to five in farmland. If they should maintain that ratio, and obtain moderate production from the woodlots, they might cut 5,000,000,000 feet yearly on a permanent basis. The practical problems of forestry are being worked out there.

The Real Problem in Wood Seasoning

HUNDREDS OF MEN are at work every day trying to solve the problems of seasoning lumber. There are a number of problems, some of which have been mastered, others are partly understood, while along certain lines investigators are feeling their way with more or less promise of final success.

It is not a difficult matter to reduce green wood to a state of satisfactory dryness, but that is one of the easy problems. The hard part is to keep the wood in that state after it is further manufactured into commodities. Those who have studied the matter of seasoning have frequently confined their efforts to the mere process of drying the wood. That is really no problem at all, where time is not important, for lumber left in the open air a sufficient period—weeks, months, or years—will season to a large extent, and a brief time in a kiln will complete the process. But the work stops at the very point where something further is necessary; because kiln-dried wood will not remain long in that state. It will begin to pick up moisture from the air as soon as the artificial heat is removed, absorbing dampness when the air is moist, and parting with some of it again when the atmosphere becomes dryer. This indicates what the real problem is—to season wood and keep it seasoned.

Ordinary green timber may be half water, a little more or a little less. In reducing the wood to a dry state nearly as much weight disappears as remains. Two formulas are in use to express the quantity of moisture in wood. One takes the timber's green weight as the basis, the other the dry weight. In the first place the water may equal fifty per cent of the green weight; in the second, one hundred per cent of the dry weight. The facts are the same; the difference is in expressing them. It is preferable to use the dry weight as the basis for expressing the moisture of wood in percentages.

Thoroughly air-dried wood contains from six to as high as sixteen per cent of water, based on dry weight, or from three to eight per cent based on green weight. It is difficult to reduce this moisture lower by air-seasoning, because if the wood parts with a little of it when conditions are favorable, it is sure to pick it up again from the air in a short time when conditions become unfavorable.

The heat of the dry-kiln reduces the moisture still lower. At 212 degrees, the temperature of boiling water, the moisture may be run down to two or three per cent of dry weight, but there that process stops. In order to expell the residue of the water, the temperature must be raised to a point sufficient to destroy the wood. That matter need not be considered in timber drying, because it is of no interest to the wood worker and passes over to the province of the distillation plant.

The wood worker, says the furniture maker, takes his kiln-dried lumber with moisture down to three or four per cent, or less, and his troubles begin. The wood presently begins to absorb water from the air, and in time returns to the air-dry condition. The moisture expelled by the kiln's heat gets back again. If the lumber would remain in one condition, even if not very dry, the problem of handling it would be simple; but it will not do that. Every change in atmospheric temperature and humidity varies the amount of water in the wood, and that is what causes the trouble.

No fact is better known than that wood shrinks and swells as it parts with or absorbs moisture. If it is manufactured into furniture when quite dry and afterwards absorbs water, swelling ensues, with the result that drawers become tight and doors open and shut with difficulty; but if it is made up while moist, subsequent shrinkage in a dry climate or a hot room will pull the joints apart.

This condition brings the manufacturer face to face with a practical and difficult problem—what can be done to lessen the shrinkage and swelling of wood? If it could be prevented from taking up moisture from the air, or parting with it, one of the wood worker's most perplexing problems would be solved. But wood does take up and part with water and that fact is at the root of the trouble.

Solutions and ameliorations of the difficulty are being sought along various lines and in many ways, and encouraging results have been reached. The wagon maker covers his wheels with heavy paints well rubbed in. That seals the pores of the wood and the moisture is materially hindered or totally prevented from entering or escaping. Shrinking and swelling are reduced in proportion to the completeness of the sealing process. The maker of bicycle rims boils or soaks his wood in oil with the same result. The furniture manufacturer uses oils, fillers, paints, shellacs, and varnishes to seal the wood pores to hold the moisture already within and prevent shrinkage, and to shut out other moisture to guard against swelling.

They have the correct principle, but methods have not yet been perfected. Covering the surface with moisture-proof materials is still in the experimental stage. Much progress has been made, but the end has not been wholly attained.

Experimenting along other lines has brought results which hold out promise of great success. The effect of forcing superheated steam into and through the pores and cell structure of wood has opened a new field of investigation. It has been shown that wood so treated has its tendency to shrink and swell much reduced, and it is supposed that the action of the hot steam changes in some way the character of the cells or wood fibers, with the result that water is less readily absorbed. This is not new theory or new practice. Wood technologists are well acquainted with the effect. Record says in his book, "Economic Woods of the United States," page 59: "Hygroscopicity [tendency to absorb moisture] can be reduced, but not entirely eliminated, by subjecting wood to boiling, steaming, prolonged soaking, or exposure to high temperature."

Just why steaming has that effect is not well understood. If the superheated steam is applied within moderate limits it not only lessens wood's tendency to absorb moisture, but apparently increases its strength. This result may be due to the rapid drying and hardening of the individual fibers—case-hardening the wood cells themselves, so to speak. Theoretically, that ought to reduce the hygroscopicity of the fibers themselves, and if it does that, the cause of the diminished tendency to shrink and swell is not difficult to explain.

Much of this is theory as yet, because the exact nature of the change which takes place in the minute structure of the wood has not been determined. The cause is less important than the effect. Any process or agency that will diminish the influence of atmospheric moisture on wood, thereby reducing shrinkage and swelling, is a contribution to the science of lumber seasoning. The steamed ox bow, the steamed drum shell, the steamed grip of the plow handle, never change their form afterwards though exposed to rain and sun for

years. Some action seems to take place to produce the effect of sealing the wood fibers against the entrance of moisture and brings about a seasoning that stands.

The Manufacturers Defended

THE MUSICAL TIMES of Chicago in a recent issue publishes in full the address of George P. Bent before the Chicago Association of Commerce in July, with comments on the leading points of the address which was an attack on the editorial policy of the Chicago Tribune. That paper is accused by Mr. Bent of injuring legitimate business in its attacks upon the National Association of Manufacturers, and the accusation goes so far as to intimate that the paper is an enemy to development and progress, strikes at men and measures which are builders of industries, and in politics preaches what it does not practice.

The particular matter on which the arraignment is based is the Tribune's part in the publicity given Mulhall's confessions. It is asserted that in giving aid, comfort, and encouragement to Mulhall, the Chicago paper has attacked the integrity of some of the country's most valuable men, and has impugned the motives of the National Association of Manufacturers. The most specific charge is that the Tribune itself is not averse to following methods very similar to those it blames and abuses others for following; that it is on the side of socialism and against the tried and proved policies of government which have been found safe in the past; and that its influence is cast against rather than for security in business and politics.

A good many people have long been of the opinion that the Tribune is not a friend of the lumber industry, but of late it has ceased its unjust and intemperate attacks on this great and reputable trade.

Freight Rate Advance Advocated

CHAMBERS OF COMMERCE in St. Louis, Cincinnati, Pittsburgh, Philadelphia, Baltimore and elsewhere have recently taken action against advance in freight rates by railroads in what is known as the official classification territory. The reason assigned for taking that stand is that railroads are not now receiving sufficient revenue to enable them to keep up their property, give the best service, and carry on contemplated and necessary improvements.

The railroads have petitioned the Interstate Commerce Commission for authority to raise the freight rates five per cent. The matter is now pending and will be decided by the commission in the near future. The actions taken by various chambers of commerce and business associations are intended, of course, as expressions of opinion. They are, to that extent, voices raised in favor of granting the petition of the railroads for the advance.

The same roads asked for permission in 1910 to raise freight rates, and the request was refused. The Interstate Commerce Commission suggested at that time that the roads increase their revenues by doing more business rather than by raising freight rates. The roads insist that they tried two years to work the problem that way, but without success, and they have now come forward with the old request again.

Those who are backing the railroads in their petition present arguments which do not sound unreasonable. They say that the roads are greatly handicapped for want of sufficient revenue to place their business on an up-to-date basis, and that the country's prosperity responds in a great measure to the efficiency and prosperity of the railroads. Therefore, it should be made possible for the railroads to prosper and develop, and the country will develop and prosper.

This may be putting the cart before the horse. Perhaps, the railroads prosper because the country is prosperous, rather than that the country's prosperity depends on that of the railroads. At any rate, the Interstate Commerce Commission will soon hear these arguments and many more, and will either grant or refuse the request for a general advance in freight rates. The matter is being thoroughly advertised, and those who wish to be heard pro or con will doubtless be accorded the opportunity.

Ocean Freight on Lumber

IN A RECENT ISSUE of HARDWOOD RECORD an English view of the proposed advance in ocean freight on lumber between American ports and Europe was quoted. It appears that the proposed increase has not yet gone into effect, but dealers on the other side are figuring out what is likely to happen. One trade paper says that the seriousness of the feared increases takes on a rather unpleasant aspect for buyers. It puts sellers in a distinctly better position by assuring them a good profit to commence with on spot stocks, and another in prospect when they sell. Some in the trade are inclined to think that higher freights will put serious restrictions in the way of trade. Possibly some slight curtailment may take place, but as consumers are without stock they must keep on buying and face the market, whatever happens. There is always a more solid demand for hardwoods in England than is usually experienced with other kinds of timber; in other words, there is less scope for speculation and speculative work.

Caesar Crossing the Rubicon

(See Cover Picture)

When Julius Ceasar crossed the Rubicon,
  Rome sat upon her seven hills and howled.
A hemlock log was what he crossed it on,
  Along whose trunk fierce catamounts had prowled.

High overhead the sullen wilderness
  Shut out the sun by day, the stars by night;
And blue-eyed owls sat moping in distress,
  And jaybirds screamed and wheeled in headlong flight.

Great Caesar crossed and Rome was free no more:
  The loyal legions flung their shields away
And hit the pike for Tiber's distant shore
  And cried, "Proh Sancta Jupiter et te!"

—*Hu Maxwell*

Recent Railroad Disasters

THERE IS A VAST MASS of hysterical piffle in the average daily newspaper every time a train made up of wooden cars or wood with steel under-frame cars is wrecked, and a howl goes up that all railroad cars should be built entirely of steel.

In a number of serious accisylvania lines stand about "horse-and-horse." The New Haven quite largely carries wooden or steel under-frame wooden sleeping and passenger cars, while the Pennsylvania railroad equipment is almost exclusively of steel coaches. The specialty of the New Haven is collisions, while the Pennsylvania's difficulty seems to lie in keeping steel equipment on the track. However, every time there is a Pennsylvania wreck the newspapers invariably say that it would have been much worse had the coaches been of wood.

The general public fails to understand the basic frailties of steel car construction, and the difficulties encountered in transporting this very heavy, cumbersome and uncomfortable variety of passenger and sleeping car equipment. To succesfully handle the heavy steel cars the average railroad of the country should have to double the weight of its rails and materially reinforce its road bed. It requires extra heavy locomotives to pull them, and then it is difficult to maintain even ordinary speed.

A photograph of a recent wreck on the New Haven shows a massive locomotive which has ploughed into wooden coaches stripped to the fire-box, and yet it is announced that if the coaches had been of steel of loss of life would not have been so great. Every rear-end collisions where steel coaches have been employed has been just as disastrous to life as a wreck of wooden coaches.

What is required is train operation that involves reasonable discipline and intelligent regulations. There is no safety to the public in any type of railroad car that can be constructed to resist the impact of a heavy locomotive. One type is just as dangerous as the other to life and limb.

That remarkably sane newspaper, the New York Sun, has this editorial comment on the recent New Haven wreck:

Whether on the unfortunate New England lines or on any other railroad, a rear end collision is inexplicable and indefensible on any theory of train operation that includes reasonable discipline and intelligent regulations. No assumed public demand for speed and no clerical record of train arrivals can excuse or condone a rear end collision.

On the subject of wooden coaches, let it be remembered that the vast majority of passengers ride safely and comfortably in such vehicles daily, without thought of danger. The composition of cars is of importance, but it is emphatically of less interest than the management of trains.

Reported Curtailment of Census Work

INFORMATION COMES through unofficial channels from the Department of Commerce at Washington that the Bureau of the Census is about to discontinue nearly all the annual reports in which lumbermen and wood-using industries generally are greatly interested. Among those special reports, which have appeared annually for some years, and which are now to be discontinued, according to information, are statistics on crossties, wood preservation, pulpwood, tanbark and tanning extracts, the cooperage industry both tight and slack, veneers, poles, crossarms, brackets, insulator pins, and wood distillation. It is said that the fate of the annual lumber cut report itself is in doubt.

These constitute a pretty large subtraction to come from the country's lumber statistics. It will not leave any great amount, in the way of information, for the government to supply the lumberman. The proposed cutting down of the Census work is doubtless planned in the interest of economy; and no one will be disposed to criticize the motive; but it seems pretty hard for the lumber interests to have practically all of their information cut off. If the cut is to go down the whole line of the country's industries in the same ratio, the field of the Census Bureau will be greatly restricted, and a vast amount of valuable information will fail to reach the people.

There appears to have been little or no criticism of the Census on the part of lumbermen because of lack of economy. There has been some impatience expressed on account of delay in getting the reports out; but this very impatience is proof that the reports are anxiously awaited. Greater speed than formerly has been recently observed. The annual lumber report, which appears in this issue of HARDWOOD RECORD, is four months ahead of the time when such reports have been published in recent years. This is encouraging. It is proof that such reports can be pushed through; but it acts like a wet blanket to be told that the reports are to be cut off altogether.

The lumber interest is pretty large. It is difficult to say just what it amounts to yearly in money, but the raw material alone, with a little manufacturing in some instances, exceeds a value of $850,000,000 a year. It is a rather large interest to be cut out of the yearly census reports for the sake of economy.

Let it be hoped that the report of its elimination was premature. At any rate, one may be pardoned for indulging the hope that no such step will be taken without giving the wood-using interests a chance to be heard. On the other hand, lumbermen should realize that if they do not make their wishes known, their silence can justly be construed as consent that the annual reports on lumber and its manufactured products be discontinued.

Lumbermen Asleep at the Switch

THE NEED OF CO-OPERATION among those engaged in the lumber trade to prevent adverse legislation and to protect the trade from the establishment of the so-called wood substitutes is being evidenced daily on every hand. The realization of the situation among the lumberman will bring proper means for combatting the advances of substitute materials. While many substitutes are claimed superior and less expensive than wood, they are not at all adapted to the purpose to which they are put. In other cases it is evident that substitutes are successfully used, while probably not superior to wood. Legislation in regard to the use of wooden cars, shingles, etc., is assuming a threatening aspect without any apparent interference on the part of the lumber trade.

A recent instance of legislation, which passed without objection from lumbermen until the law was about to become effective and is now in effect, occurred in Milwaukee, Wis. A good many days after the building ordinance was passed by the common council and just before it became effective it was "discovered" that the use of combustible shingles was prohibited on "new or altered buildings and also when roofs were re-covered." The ordinance was drawn by the Milwaukee Building Code Commission. While Building Inspector Harper, who is inclined to defend the new measure and says that it is progressive legislation copied after the ordinances of other cities, insists that there was no intention of fooling anybody in embodying this provision in the ordinance, lumber dealers and wholesalers of Milwaukee are inclined to feel that they have had an unfair deal "slipped over" on them. In fact, many aldermen of the outlying wards were awakened to the fact that they voted and passed an ordinance which prohibits absolutely the covering of roofs in any part of the city with wooden shingles. The general opinion semed to have been that this was to apply only to buildings within the fire limits.

Milwaukee lumber dealers, especially those who have large stocks of shingles on hand, are protesting because they will suffer financial losses if the law is allowed to stand as at present. Amendments are being proposed which would permit wooden shingle roofs on buildings not over 24 by 40 feet and otherwise apply only on buildings within the fire limits of the city. At present, wooden shingles are to be used only if fire-proofed. Present wooden shingle roofs can be patched with wooden shingles, according to opinions on the ordinance.

State Subsidy for Merchant Marine

CALIFORNIA AND LOUISIANA have taken the bull by the horns in the matter of merchant marine. They want ships to carry commerce to and from their harbors, and have grown weary of waiting for the government to offer such inducements as will encourage the building and sailing of merchant vessels. Louisiana has taken off all state tax on ships sailing between her ports and foreign countries. It is believed this action will stimulate foreign trade.

California has offered to do still more. A bill has been introduced in the state legislature providing for a board of five merchant marine commissioners, one from the resident ship-builders, one from the resident ship-owners, one from the shippers of domestic goods, one from the consignee of foreign goods, and one from the sailors' union.

This board is to have authority to pay five per cent per annum upon one-half the building cost of ships engaged in foreign and domestic commerce from California ports and to help on the payment of the difference between building and operating such American-built ships with American workmen and American officers, and the cost of building and operating with foreign workmen and officers.

Closed Shop Illegal in Indiana

A STRIKE OF LONG STANDING in Indianapolis against the Keyless Lock Company has been settled by a court decision, as far as such a decision has power to settle it. Judge W. W. Thornton handed down the decision in the circuit court July 9. He held that a strike for the purpose of compelling an employer to establish a closed shop is unlawful. The strike had been called for that purpose as was shown by a letter addressed to the company by the secretary of the labor union, in which the company was warned that if it continued to employ non-union men (three such were working at that time) a strike would be called at the end of two weeks. The company did not accede to the demand and the strike was called, the plant was picketed, and violence resulted.

The court's decision granted an injunction against the labor organization concerned in the matter, forbidding interference in any way with the operation of the lock factory, or with employes who choose to work there. It was further adjudged that the company had been damaged in the amount of $6,000, and had a right to recover that sum from the labor organization that had ordered and engineered the strike with its attendant violence. This decision establishes for the first time the illegality of the closed shop in Indiana.

Pert, Pertinent and Impertinent

September

Frost in the air, and breezes blowing
Chill from the West at morn.
Crimson leaves on the maple glowing
And gold of ripened corn.
Song of the crickets, gaily calling,
And drone of laggard bees:
Seeds from a thousand seed-pods, falling
Over a thousand leas.
Be glad my heart, and a song of cheer
Give to the world, when September's here.

Sunshine and moonshine, changed and altered,
Haze over hill and lea,
Even song of the brook has faltered,
Crooning on toward the sea.
Patter of nuts and acorns falling,
Feast for the squirrels spread,
Quails in the distant stubble calling,
And apples ripe and red.
What if Winter is drawing near,
Earth's at her best, September's here.

Perfume sweet where the wild grapes offer
Wine that a king might praise,
Fruits of the year in an open coffer,
Gift of the passing days.
Wake from your sleep, O, idle dreamer.
Toiler, turn from your toil,
Follow the sumac's crimson streamer
Back to the wood and soil,
Steal one perfect day from a year
Of toil or dreaming, September's here.

—*L. M. Thornton.*

ONE ON HIM



The Lumber Buyer (interrupting): I don't see any sense in calling a lumber salesman a lumber drummer.
The Salesman: No?
The Lumber Buyer: A drum ain't a wind instrument, is it?

No Place for Spelling

Mother (looking over her boy's shoulder): "Your spelling is perfectly terrible."

Little Son: "That isn't a spellin' lesson. It's a composition."—*Good News.*

Her Health

An old lady, really well, was always complaining and "enjoying poor health," as she expressed it. Her various ailments were to her the most interesting topic in the world. One day a neighbor found her eating a hearty meal, and asked her how she was.

"Poor me," she sighed. "I feel very well, but I always feel bad when I feel well, because I know I am going to feel worse afterward."

Often Noticeable

Women have no sense of humor, unless it is in their choice of husbands.—*Judge.*

Gallant Soul

An old couple came from the country, with a big basket of lunch, to see the circus. The lunch was heavy. The old wife was carrying it. As they crossed a street, the husband held out his hand and said:

"Gimme that basket, Hannah."

The poor old woman surrendered the basket with a grateful look.

"That's real kind o' ye, Joshua," she quavered.

"Kind!" grunted the old man. "I wuz afeared ye'd git lost."—*Argonaut.*

Reason Enough

Most of us work like the Irishman who was out in a pouring rain digging a ditch in the mud. Asked why he was doing it, he replied, "Begorry, I'm diggin' the ditch to earn money to buy bread to give me strength to dig the ditch."

No Comparison

"That woman over there who talks so much thinks she is a perfect well of wisdom."

"Not much. Wells do dry up sometimes."

Particular

After the teacher had recited "The Landing of the Pilgrims," she requested each pupil to try to draw from his or her imagination a picture of Plymouth Rock.

Most of them went to work at once, but one little fellow hesitated, and at length raised his hand.

"Well, Willie, what is it?" asked the teacher.

"Please, ma'am, do you want us to draw a hen or a rooster?"

A Miss

Being an old maid is like death by drowning,—it's easy after you cease struggling.—*"Dawn O'Hara."*

Available Foreign Hardwoods

EIGHTH ARTICLE

HARDWOODS OF CUBA

Editor's Note

Following is the eighth of a series of articles on foreign hardwoods available for use in this country. The first covered hardwoods available in the Central American countries; the second covered hardwoods available in South American countries; the third hardwoods of Africa; the fourth hardwoods of Ceylon; the firth hardwoods of Burma and India; the sixth hardwoods of Hawaii, and the seventh covered hardwoods of Australia.

Cuba is located about 130 miles south of the southern extremity of the mainland of Florida. Its area is approximately 43,000 square miles, or about the same size as the state of Pennsylvania. The uncleared and almost untouched forests of Cuba are no less than 15,000,000 acres in extent. It is here that the tropical species meet those of the colder climates, with a consequent result of a greater intermingling of tree species than in any other part of the western hemisphere. The composition of the Cuban forest presents many curious features which have interested foresters and scientists in general. The pine, which is a distinctly temperate species, is found here growing side by side with mahogany, a tropical species. The possibilities of securing a number of varieties of valuable woods within the compass of a mile or two has attracted the lumberman of the United States. A number of these are large trees yielding very beautiful, hard, and heavy woods susceptible of a very good polish. One lumberman who is operating in the Province of Oriente is planning to cut 119 hardwood species for the market. A number of these woods are already known to the American and English markets, while the majority of them are new or little-known. It is believed that a number of the latter class will eventually be introduced into our markets for crossties.



A CUBAN LANDSCAPE WITH AN EVER-PRESENT CEIBA TREE TO THE LEFT

The exportation of Cuban timber has greatly increased during recent years, and the total value of the annual shipments aggregates about one and a quarter million dollars. The principal kinds included are cedar, cocus, dagame, lancewoods, lignum-vitæ, logwood, mahogany, palm and palm leaf, and mahagua. These woods have been a great source of wealth to Cuba and after the transportation facilities are better developed, the extensive forests in the interior will be rendered accessible. There is no question that these woods are very abundant in the mountainous regions and that many other kinds will become valuable. Lumbering always has been one of the most important industries in Cuba, and it will continue to be one of the chief assets. There is still a good supply of mahogany and cedar, as well as other valuable woods, awaiting better facilities for transportation to the seaboard. The approximate value and kinds of woods exported to the United States in a prosperous year are as follows:

Cedar	$100,000
Logwood	135,000
Mahogany	135,000
Lancewood	4,000
Dagame	1,000
Cocus wood (Ebony)	500
Aluuqui	500
Dyewood	1,000
Lignum-vitæ	7..00
Mahagua	1,000

There are a number of other species exported to this and other countries. Often more than one kind are exploited and sold under the same name. For instance, mahogany denotes a class of woods which come not only from the true kind *(Swietenia mahagoni)*, but also from the cedar, sabicu and ocuje. There are several species entirely unrelated to one another which are exported under the name of ebony; the same may be said of cedar, lancewood, and lignum-vitæ. While it is often undesirable to substitute woods not true to name, they can frequently be used with equally good results. It is a well-known fact that a number of the fancy hardwoods from the tropics are not true to name, but are



ROYAL PALMS ON THE BORDER OF A PINEAPPLE FIELD

derived from a number of different species and sold under the same trade name.

The following species may be considered among the most important trees in Cuba:

Baria *(Cordia gerascanthoides)* is the name also of several other species of the genus *Cordia.* In Mexico this name is applied to the wood of santa maria *(Calophyllum inophyllum).* The Cuban baria attains a height of from sixty to eighty feet and from two to three feet in diameter. It is found in nearly all parts of the island and is said to be very abundant throughout the central part. The wood varies much in color, but the heartwood may be said to be dark brown and the sapwood much lighter. It resembles our slippery elm and is highly prized on account of its strength, durability, and lightness. The specific gravity of baria varies from .60 to .78 and the wood is easily worked, takes varnish well, and is susceptible of a good polish. The wood is used extensively in house building, carriage making, for rafters, joists, axe-handles, and for interior finish of houses.

Caobilla *(Croton lucidum)* grows to be about forty or fifty feet in height and over a foot in diameter and is quite common throughout the wooded portions of the island. The heartwood is light red in color and the sapwood considerably lighter, inclined to brown. It resembles mahogany in general appearance, but it is inferior in strength, durability, and toughness to true mahogany. It weighs about fifty pounds per cubic foot. Its principal uses are for making furniture, weather-boarding, and framing.



A DENSE JUNGLE OF A WEST INDIAN FOREST

Cocullo *(Bumelia nigra)*, also called cocuyo, is a tree found chiefly in moist woods and grows to the height of fifty or sixty feet, and from two to three feet in diameter. The heartwood is yellowish white and the narrow sapwood is nearly white. In the southern part of the island it can be obtained in considerable quantities. The wood is strong, hard, heavy (about seventy pounds per cubic foot), elastic, and can be worked with moderate ease. It is used chiefly for cart construction and building and is said to be very durable in contact with the soil.



THE ROYAL PALM AS AN ORNAMENTAL TREE. A VERY COMMON VIEW IN CUBA

Dagame *(Calycophyllum candidissimum)* is the well-known wood from which fishing rods are made. The tree, which attains a height of from fifty to sixty feet, is said to be one of the most common kinds, and large quantities of this wood are exported annually. The trunks are usually straight and free from branches for more than one-half the total height of the tree. This tree is found most abundantly near the foot of the mountains. The wood is light yellowish, somewhat resembling boxwood, hard, heavy (about fifty-five pounds per cubic foot), strong, tough, very durable, and works rather easily. It is said to turn very well and is susceptible of good polish. On account of its great strength and durability, it is used extensively for house building and in general carpentry. It is highly esteemed for the woodwork of plows, cart axles, spokes, and other parts of carriages and wagons. It is used extensively for spars.

Guayacancillo or lignum-vitæ *(Guaiacum verticale* and *Guaiacum officinale)* is produced by trees that sometimes attain a diameter of from four to five feet and from thirty to sixty feet in height. *Guaiacum verticale* is usually smaller than the *G. officinale*, which is the true lignum-vitæ, and is quite abundant along the roads in southern Cuba and furnishes the main supply of the so-called lignum-vitæ of Cuba.

The sapwood is light yellow and the heart wood dark brown, with a greenish tinge or shade. It is one of the hardest woods known, and is said to harden upon exposure to the air. Lignum-vitæ is heavier than water and has a higher modulus of rupture and coefficient of elasticity than any other wood of Cuba. In Cuba it is employed principally for sheaves of pulley-blocks or water wheels. Under water it lasts longer than iron, and is usually employed for machine bearings where its qualities of hardness and durability render it preferable to metals. In the Bahamas and other parts of the West Indies this wood is often used for hinges and fastenings on account of the quick corrosion of iron. It is also used for making rulers, skittle balls, and many other articles of turnery.

Jucaro prieto *(Bucido buceras)* is the ucar blanco or wild olive tree of Jamaica, and is found in considerable quantities along the southern coast of the island. The tree attains a height of from sixty to eighty feet and a diameter of from three to four feet. The wood is dark brown or nearly black, resembling black walnut. It is very strong, tough, and elastic. It is hard, heavy (about sixty-five pounds per cubic foot) and is very fine-grained, taking a good polish, producing a beautiful effect. Jucaro is employed largely in naval construction, wagon spokes, and for all purposes which require great strength and durability.

Ocuje macho *(Calophyllum calaba)*, variously known in other parts of the West Indies as santa maria, palo maria, galba, galaba, crabwood, aceite de maria, and chivoja, is an important timber tree in tropical America. It develops a straight growth from fifty to one hundred feet in height and sometimes five feet in diameter. It is said to be very

abundant in the province of Camaguey. The wood of ocuje macho is of a light brown color, tinged with red or yellow. It is slightly coarser-grained than mahogany and does not exhibit any annual rings of growth. The wood takes an excellent polish and the alternating lines of lighter and darker shades on the radial surface give it considerable figure. Although the wood is cross-grained, it works well, and does not split or check during seasoning. It is hard, heavy (about forty-six pounds per cubic foot), strong, tough, and bears exposure to moisture and lasts well in water. It is used for construction work, ship-building, and heavy machine work; for posts, furniture, felloes of wheels, interior finish and largely for shingles, especially in the West Indies; in Mexico it is used more extensively for furniture. Ocuje macho is sold in the Havana markets for $160 per thousand feet.

Spanish cedar *(Cedrela odorata)* is one of the best known trees in Cuba and next to mahogany is the most important kind. It is locally called cedro, because the leaves and wood of this tree have an odor similar to the true cedar of southern Europe *(Juniperus sabina)*.

While Spanish cedar is commonly distributed throughout tropical America, it appears to reach its greatest development in the rich valleys and fertile mountain slopes of Cuba, where it attains the height of nearly one hundred feet and often five feet in diameter. The logs frequently contain from 3,000 to 5,000 board feet; the average run where 15-inch logs are included is about 700 board feet. Spanish cedar yields the well-known "cigar-box cedar" and is used largely for making cigar boxes, cabinet work, interior finish of houses and for purposes requiring a durable wood. It is made into all kinds of furniture, and is much admired for its rather close grain and beautiful color, resembling true mahogany. In Havana the wood of the largest and best trees sells for $100 to $150 per thousand board feet.

Sabicu *(Lysiloma sabicu)* is the wood of a leguminous tree, which grows to the height of from sixty to eighty feet and sometimes from five to seven feet in diameter. The wood was first introduced in England but it is now becoming known in this country and is highly esteemed as a substitute for the true mahogany, which is now very scarce in the accessible parts of the island. The wood is very hard, rather heavy, strong, tough, and is very much liked for veneering and finishing work. It is dark chestnut brown and resembles true mahogany. Sabicu is usually free from shakes, and while it seasons very slowly it does not check during the process. On account of its durability when exposed to an alternation of air and water, it is used for boat building and also for house building and general carpentry. The wood is now being exploited extensively in the province of Santiago de Cuba, where the best hardwoods are found.

Logwood *(Haematoxylon campechiamum)* is a tree which often reaches a height of from fifty to sixty feet and about a foot in diameter. While the tree is native to Cuba, it does not grow very abundantly naturally, but it has been planted and in parts of the island has been cut for export. The best logwood is said to come from Jamaica, Santo Domingo, and Yucatan.

Mahogany *(Swietenia mahagoni)* is one of the best known woods in the western hemisphere, when it is taken into account that its natural geographic distribution is restricted to tropical America, very little being obtained in northern part of Colombia and Venezuela. The wood from Cuba is known as Spanish mahogany in order to distinguish it from that derived from Mexico and other parts of the mainland. The mahogany now obtained in Cuba, while of good quality, is not so acceptable as that from Mexico, on account of the small size. It is very rare in parts of the islands, and the material consists largely of such logs as were not accepted by former exploiters of mahogany. It has the reputation of being harder, darker and more figured than that from any other locality within its range of growth. The figured or bird's-eye mahogany sometimes brings as high as $400 or $500 per thousand. A good deal of the mahogany obtained in Cuba is sold for less than $50 per thousand feet in New Orleans and Mobile.

Majagua azul *(Paritium elatum)* is one of the most important trees in Cuba, not so much on account of the wood, but because the inner bark of this tree yields exceedingly tough fiber used by the Cubans for many purposes. The wood is of a deep greenish blue color, from which it derives its name. The tree grows in moist woods and is particularly abundant in the province of Camaguey, where it is often found on the well drained ridges. The best timber as to strength and elasticity, is produced on dry rocky soil. The wood is used for boat building, carriage making, furniture, and gunstocks. It is in demand in the Havana market, but shipments are received in this country and sold for from $100 to $150 per thousand feet.

Yava *(Andira inermis)*, also known as angelin, cabbage wood, or bastard cabbage, is very common in the reddish soils throughout southern Cuba. It is a rather large tree, ranging from forty to sixty feet in height and from three to five feet in diameter. The wood varies very much in color, which has led to the belief that there are several species. The wood is hard, heavy (about fifty-eight pounds per cubic foot), strong, tough, very durable, both in and out of water. It is suitable for pile and bridge timber and is used extensively in ship construction, especially for keel, rudders, and planking, and for framing houses, mill rollers and naves of wheels. It is used also for making walking sticks, umbrella handles and in turnery.

West Indian or green ebony *(Brya ebenus)* is a well-known timber tree common throughout tropical America. It is not a true ebony, but belongs to the same family of plants as our black locust. The tree is from twenty to thirty feet in height and seldom a foot in diameter. The heartwood is nearly black and is often used for the same purpose as the true ebony. It is very hard, heavy, strong, and is used for making handles of tools, walking sticks, and fine cabinet work. The wood is also called granadillo in the market.

Royal palm *(Oreodoxa regia)* is perhaps the most striking of all the trees in Cuba. It is found in all parts of the island. It rises to the height of from sixty to eighty feet and has a perfectly straight trunk, which is often from twelve to eighteen inches in diameter. Every part of this palm is utilized by the Cubans. The timber, which has many uses, is not exported, except in a small way for making walking sticks. The basal parts of the leaves are very valuable for wrapping the tobacco for shipment.

Wooden Houses in Europe

Wood holds its own in parts of Europe where timber is much scarcer and of higher price than in America. This is true particularly of house building in rural communities. The special measures taken by the Swedish government in recent years to promote the increase of small holdings and the widespread use of timber in the construction of houses and farm buildings in Sweden attracted attention sufficiently in England the past year to cause the sending of a committee to Scandinavia to study the subject at first hand. The committee's report brings out some interesting points regarding the universal use of timber for constructive purposes in Scandinavia. The committee found, what is often a surprise to visitors to a country where timber is a natural product, that house construction in wood is not appreciably cheaper than brick, even in Sweden. Outside the large towns first-class houses constructed entirely of wood are in great favor, and in many cases afford striking architectural studies, which the sylvan surroundings invariably blend into a charming picture. Indeed, Swedish experience affords valuable evidence of the durability of good timber construction, and Swedish architects say that timber buildings may be relied upon to last fully fifty years.

Comparatively little trouble seems to be experienced from dry rot or insects. This is largely accounted for by the fact that timber buildings are always well elevated on a stone or other foundation, which permits of free circulation of the air, and in most cases the ground is dug out over the whole or part of the site to form a cellar. Further, Stockholm tar is frequently used as a preservative. The report includes instructive particulars in the form of specifications and priced schedule of quantities for the construction of timber houses and stone and timber farm buildings for a typical Swedish small holding.

The subject of wooden houses in England is being investigated along other lines. A writer in one of the London papers has been digging among old records in Ireland and finds that framed houses were dispatched with immigrants from London in 1613 and erected in the Diamond at Londonderry and in the Diamond at Coleraine for occupation by the English settlers. Some of these houses were in existence and tenanted up to about 1850.

Lumber Output for 1912

A preliminary statement of the output of lumber, lath, and shingles in the United States during the calendar years 1912, 1911 and 1910, has been issued by the director of the Census, William J. Harris. It was prepared under the direction of William M. Steuart, chief statistician for manufactures, by Jasper E. Whelchel. The data was collected, as for several years past, in co-operation with the Forest Service. The publication of the statistics for 1912 over four months earlier than for the preceding year gives them additional interest and value.

The active mills contributing to the totals numbered 29,648 in 1912, 28,107 in 1911, and 31,934 in 1910, while the reported production in these years was 39,158,414,000, 37,003,207,000 and 40,018,282,000 respectively. The statistics were collected almost entirely through correspondence by the Bureau of Census, and cover the output of practically every commercial mill in operation during the whole or any part of this period, except small neighborhood mills and others showing a total cut of less than 50,000 feet board measure.

On the whole, the showing for the past year indicates improved conditions in the lumber industry. Although the total reported cut was slightly less than in 1910, the average yield per mill was 5.3 per cent greater than in that year, while the total production over 1911 was 2,155,207,000 feet, or nearly 6 per cent. In view of the fact that it was a presidential election year, the degree of activity in the lumber industry during 1912 as reflected by the figures is especially noteworthy, the output exceeding that of four years earlier—1908—by nearly 6,000,000,000 feet, or 17.9 per cent.

Increases among the individual states were quite general, slight exceptions appearing in certain of the eastern states and a few of the western mountain states, with of course the usual decrease in the output of the lake states which has characterized the showing for several years, due directly to the rapidly decreasing supply of lumber material in this region. While both the principal lumber producing centers, namely, the southern states and the Pacific coast states, reported larger cuts in 1912 than in the preceding year, the increased production in the first-named group was substantially greater than for the United States as a whole. The development of the lumber industry in the southern states during recent years has been rapid. At the census of 1900, 38.7 per cent of the total production in the United States was reported from this region, while in 1907 it contributed 45.7 per cent of the output and in 1912, 51.4 per cent, or more than one-half of the total.

The production reported from Washington in 1912 was the largest recorded since 1906. Although for nearly a decade this state has led all others in the production of lumber and shingles, in 1912 it contributed more than one-tenth of all the lumber and nearly two-thirds of the shingles manufactured in the United States.

Of the reported total lumber production, softwoods contributed 30,526,416 M feet board measure in 1912, as against 28,902,388,000 feet in 1911, and 31,160,856,000 feet in 1910. More than nine-tenths of the present stand of yellow pine—the softwood which is drawn upon most heavily for lumber material—is in the yellow pine belt, which comprises the Atlantic and Gulf coast states from Virginia to Texas, inclusive, together with Missouri, Arkansas, and Oklahoma. Under the term yellow pine are included the several species, longleaf, shortleaf, loblolly, Cuban, etc. The reported cut from yellow pine timber in this territory during the year amounted to 14,470,617,000 feet board measure, or about 98 per cent of the total output from this species in the United States. Douglas fir, the species which ranked next to yellow pine among the conifers or softwoods, supplied material for 5,175,123,000 feet board measure. The production from both of these species was greater in 1912 than in the preceding year. White pine ranked third among the softwoods in 1912, though the cut from this wood was smaller than in the preceding year, and has been declining steadily for several years past.

The reported cut of hardwood lumber in 1912 was 8,631,998,000 feet board measure, as against 8,100,819,000 feet in 1911, and 8,857,426,000 feet in 1910. To this total oak, the leading hardwood species, contributed 3,318,952,000 feet, or 38.4 per cent, and showed an increase over the output for the preceding year of 220,508,000 feet, or 7.1 per cent. Maple, red gum, tulip poplar, chestnut, beech and birch followed oak in the order named.

The production of lath and shingles in 1912 did not differ materially from the output of these products during the preceding calendar year, although each was reported in slightly smaller quantities than in 1910.

The comparative summary follows:

LUMBER PRODUCTION (M FEET BOARD MEASURE)

STATE	1912	1911	1910
United States	39,158,414	37,003,207	40,018,282
Washington	4,099,775	4,064,754	4,097,492
Louisiana	3,876,211	3,566,456	3,733,900
Mississippi	2,381,898	2,041,615	2,122,205
North Carolina	2,193,308	1,798,724	1,824,722
Oregon	1,916,160	1,803,698	2,084,633
Texas	1,902,201	1,681,080	1,884,134
Arkansas	1,821,811	1,777,303	1,844,446
Virginia	1,569,997	1,359,790	1,652,192
Wisconsin	1,498,876	1,761,986	1,891,291
Michigan	1,488,827	1,466,754	1,681,081
Minnesota	1,436,726	1,485,015	1,457,734
Alabama	1,378,151	1,226,212	1,465,623
West Virginia	1,318,732	1,387,786	1,376,737
California	1,203,059	1,207,561	1,254,826
Florida	1,067,525	983,824	992,091
Pennsylvania	992,180	1,048,606	1,241,199
Georgia	941,291	801,611	1,041,617
Tennessee	932,572	914,579	1,016,475
Maine	882,128	828,417	860,273
South Carolina	816,930	584,872	706,831
Idaho	713,575	765,670	745,984
Kentucky	641,296	632,415	753,556
New York	502,351	526,283	506,074
Ohio	499,834	427,161	490,039
New Hampshire	479,499	388,619	443,907
Missouri	422,470	418,586	501,691
Indiana	401,017	360,613	422,963
Montana	272,174	228,416	319,089
Massachusetts	259,329	273,317	239,206
Vermont	235,983	239,254	284,815
Maryland	174,320	144,078	154,554
Oklahoma	168,806	143,869	164,663
Illinois	122,528	96,651	113,506
Connecticut	109,251	124,661	126,463
Colorado	88,451	95,908	121,398
New Mexico	82,650	83,728	83,544
Arizona	76,287	73,139	72,655
Iowa	46,593	59,974	75,446
New Jersey	34,810	28,639	36,542
Delaware	28,285	23,853	46,642
South Dakota	20,986	13,046	16,340
Rhode Island	14,421	9,016	14,392
Wyoming	13,560	33,309	30,931
Utah	9,055	10,573	11,786
All other	*22,525	*11,786	*12,594
Lath (thousands)	2,719,163	2,971,110	3,494,718
Shingles (thousands)	12,037,685	12,113,867	12,976,362

* Includes Kansas, Nebraska, and Nevada.

Cypress in the Silo Fight

The manufacturers of cypress lumber have demonstrated one thing pretty thoroughly, and that is, they know how to go after business. They are like one of Victor Hugo's characters who could "make things happen." The latest campaign is directed toward the silo business of the country. A booklet of something over one hundred pages has just been issued by the Southern Cypress Manufacturers' Association of New Orleans. It advises farmers to build wooden silos, and of course it recommends cypress.

This is one of a series of similar books issued by the association, each recommending wood, and particularly cypress, for a specific purpose. One was a barn book, another a carpenter's book, a third was a trellis and arbor book, and so on. Each specifies the value of wood for a particular use.

The silo has become an important part of the farm. The first one was built in this country in 1875, and now fifty manufacturers make silos. The cement, brick, tile, and stone people are fighting for the business, and the lumber interests cannot afford to be inactive. The wooden silo is best. It is as cheap as any other and does the work better; but the farmers need to be impressed with this fact, otherwise they may be persuaded to try some substitute. For that reason the booklet just issued by the cypress association is bound to do good for all kinds of wood suitable for silo building.

Standard Sizes of Dimension Stock

Those who dream dreams and see visions look forward to a time when sizes of half-manufactured stock for wood commodities shall be reduced to a comparatively small number of standards. That is, all furniture makers are to use standard lengths, breadths, and thicknesses; chair makers to have certain fixed dimensions; cabinet makers the same, and so on down the line through all the wood-using industries that draw their supplies from the sawmill, lumber yard, and planing mill.

That state of affairs may be brought about when universal peace is established throughout the world and war has been abolished by all nations, including Mexico; but it is so far in the future now that something more practical and possible ought to be considered.

There is a practical side to the question, but it does not go to the extent of supposing that all furniture manufacturers, chair makers, vehicle people, cabinet shops, and so forth, will agree to confine their respective commodities to a few similar sizes and patterns. The people who make these things are not yet ready to surrender their individuality, abandon originality, and settle down to make a few common articles exactly like all their competitors are making them, and for the sole sake of being able to buy their dimension stock in the open market instead of making it themselves in the particular kinds and styles that they want.

It is not impossible, however, that some method less wasteful and costly than the present can be worked out to cover part of the manufacturing field. Take for instance the maker of filing cabinets. He uses a large number of different sized pieces of wood. He buys the lumber and cuts out the stock in his own factory. Such a factory uses from eighty to one hundred different sizes. Although he buys lumber as nearly suited as possible to his needs, and cuts with intelligence and care, there is much waste that must be thrown away. Unless the lumber is of quite a good grade, there are many knots, shakes, splits, and rotten pieces that are useless. He has paid freight on what he throws away as well as on what he can use.

It would be desirable, if practicable, to have this stock cut out at the sawmill, and the dimensions alone shipped to the factory to be made up into filing cabinets. It has been argued that material as well as freight could thus be saved.

This is only one industry. The same argument would apply to most of the wood-using industries that require large quantities of small dimension stock. It has been asked why they cannot have the sawmills cut out the stock for them, in exact sizes, thus giving each manufacturer just what he needs, no more, no less. No factory would be paying freight on waste, and would not need to throw away knots, shakes, and splits which had been paid for at so much a thousand feet.

Difficulties are met when an attempt is made to put this theory into practice. It is a common saying that it works better on paper than at the sawmill. There is probably not a manufacturer in the industries mentioned who has not done a good deal of thinking along that very line, and many have not stopped with thinking but have worked on the practical end of the proposition. They would like to buy their stock that way, if they could. That they have not been doing so is proof that something is in the way.

The sawmill man has not been able to get out the dimension stock, because there are too many sizes and kinds. He might take orders from a single factory, and work out its cutting bills, and if that factory took the mill's whole output, the scheme would work that far. But if the mill should cut beyond its specific orders, where would it sell the surplus? The pieces are all of the special kind used by one factory, and no other would want them.

There in a nutshell lies the trouble. Hundreds, even thousands, of sizes and kinds of stock are in use. If a mill should cut certain sizes only, it would have to know where to sell them. If it tries to keep all sizes in stock, it will find many a lot left on its hands, because the particular lots are not wanted by any purchaser in the mill's district.

It resolves itself simply to this: The business of cutting and selling miscellaneous dimension stock is so complicated that no mill is willing to undertake it. How much more complicated would it become if hundreds of scattered sawmills should undertake to cut such stock and trust to the general market to take it?

It does not pay a sawmill to put in the special machinery required for cutting such stock, unless it can be done on a fairly large scale. The work that might be furnished by orders from one, two, or three factories would seldom be sufficient to justify a mill in putting in and operating the extra plant, even if long-period orders could be assured.

Many persons have tried to devise some way to accomplish the desired end; to formulate a plan by which a large part of the dimension cutting could be done at sawmills instead of at the factories where the completed commodities are turned out. No one has yet succeeded, but the consensus of opinion is—at least, it is the opinion of a number of persons who have investigated the matter—that if the problem ever reaches solution it will be by the aid of some sort of middleman or association that will act as a go-between.

According to that plan, the middleman would act as a clearing house, so to speak; on the one hand acquainting himself with the needs of the factories which use dimension stock, on the other arranging with mills to cut it. Under the plan, he would get in touch with the factories, find out all the sizes and kinds of stock needed, and the amount of each size and kind; then with this information, arrange with the sawmills to produce the stock. The details would be multitudinous, of course, but the general outline of the plan is simple. It might not work out in practice, but the theory appears to present no insurmountable obstacles. Something of the sort is already in fairly successful operation by the vehicle manufacturers and the mills that cut the stock. However, the vehicle field is smaller, the sizes of stock are less numerous, and few kinds of wood are used. A plan embracing furniture of all kinds, cabinets, tools and implements, and miscellaneous commodities, would call for hundreds, probably thousands, of sizes of stock, and numerous kinds of wood and grades of lumber, and if such a plan should be tried and be found impracticable, the failure would probably be due to the vast array of details and to the large number of people concerned, rather than to any defect in the plan itself.

Perhaps no attempt should be made, at least not at first, to have a single dimension-stock clearing house for the whole country. The perfection of an arrangement to include so much territory would doubtless be a good while in the future, even after success on a small scale had been found practicable. The country is divided naturally into fairly-well defined industrial districts, each of which might be organized as a separate unit. A general association would properly be a matter for subsequent consideration, should the occasion arise.

Assuming that such a scheme could be successfully put into practice, it ought to accomplish a great deal in the way of saving waste, saving freight, and saving in numerous other ways. It would help to standardize where that result is desirable, and would not discourage or suppress individuality or originality.

Less waste in cutting, than under the present method of each manufacturer cutting out his own stock, would be bound to result. The factory which uses only a few sizes, and those sizes rather large, must throw away many a piece that would be available for smaller sizes. The mill that might have a thousand sizes on its cutting bills, from large to very small, can work down to the smallest limit, even to dowels and clothes pins, in cutting, and what would go to ultimate waste would be sawdust and chips. Many a factory which cuts for itself, wheels out cartloads of blocks which some other factory could use, if it had them. The factory which has this waste does not willingly throw it away, but would be glad to use it or sell it, if it could. To hunt a buyer for it, and ship to that buyer would cost more than it would come to. But if these blocks were at the mill which has customers for all sizes, they would go through the machines, come out as small dimension stock, and go to the customers who are in the market for that kind.



The Manufacture of Drums



Chicago is said to be the center of the drum manufacturing business of this country. It is even claimed that more than half of the drums made in the United States are manufactured in Chicago. Difficulties are encountered when an attempt is made to compile figures showing the extent of the drum business in this country, for statistics collected by the census do not list small musical instruments separately, and drums are classed among such instruments, and most of them are moderate size; but the largest drums are by no means diminutive.

What is said to be the largest factory in the United States devoted exclusively to the making of drums is located at 218 North Main street, Chicago, and is known as the Wilson-Jacobs Drum Manufacturing Company. The establishment has 21,000 square feet of floor space.

Although the drum is one of the simplest of musical instruments, and appears to the uninitiated as though there is little to it, yet its manufacture by modern methods requires no small amount of special machinery and demands skilled labor in several departments. Some of the machines are for working in wood, others for metal working, and though the cutting and manipulating of the skins of which heads are made are done chiefly by hand, yet even that requires considerable apparatus in a factory that consumes 10,000 skins a year.

Without the skin there can be no drum, for that is one thing for which no substitute has yet been found. In every part of the world, among savages who make drums of gourds and hollow logs, as well as among civilized men of all nations, the drumhead is of skin. It appears to be the only material yet found that will produce the proper vibration when struck. The drum belongs to the stringed instrument class. The entire head acts as one broad string, and the size of the instrument and the tautness of the membrance determines the tone produced when the drum is struck.

Size and tautness are not the only factors in choosing a drumhead. The quality of the skin is of prime importance. The experienced drum maker selects the skin as carefully as the maker of fine violins selects the spruce which he uses. Ordinary leather will not answer. In fact, no kind of leather will do. The skin intended for a drumhead must not be touched by any sort of tanning material. It is simply the raw hide with the hair scraped off. It is treated with divers rubbings, scrapings, and manipulations to reduce it to uniform thinness and texture, and then it is properly cured, and it becomes the raw material which the drum maker takes in hand to give the final finishing. What he does to it is part of his art. Every drum manufacturer possesses a few secrets which he keeps to himself, and most of these are in regard to the final finishing of the skins that go on high-class drums.

Calf skins are used more than any other for this purpose; but some drumheads are of sheep skin and a few of angora goat. They are yellowish white when they reach the drum factory, but when they have gone through the succeeding processes they are a translucent white. Some are almost transparent and look like the finest parchment. A drumhead must consist of a single skin. It is possible to splice and patch them, but the process is not usually regarded as satisfactory. An otherwise good skin may be rendered practically useless by the presence of a small hole.

Drum shells are either of wood or metal. If of metal they are usually copper plated with nickel, or the plating may be of silver, or even of gold if the purchaser is willing to pay the price. Manufacturers of drums insist that the material of which the shell is made has nothing whatever to do with the quality of sound emitted when the head is struck. Experiments have been made to prove or disprove this claim, and the conclusion has been that a wooden drum shell gives no different sound from one of metal, and that as far as tone, pitch, and quality are concerned, one wood is the same as another when worked into drum shells.

The selection of the material is wholly a matter of choice. If of wood, the manufacturer uses whatever his customers want. However, the number of woods commonly used is not large. Almost any wood that can be had in sufficient sizes may be occasionally employed; but practically all drum shells are of one or another of the following: Oak, maple, mahogany, rosewood, black walnut or holly.

The making of wooden drum shells is not a very complicated process, but it involves a number of points. The visible part of the shell is veneer. It is bent to the required form, and is steamed and passes through the hot box—a finishing kiln—and comes out so firmly set in its shape that it never warps or changes form. The veneer outer shell is only part of the completed shell. It is lined with yellow poplar veneer. The grain of the outer veneer runs round the drum; but the grain of the poplar veneer is up and down. The poplar is known as cross-banding.

It is noteworthy that the lining or cross-banding is always yellow poplar—at least it is so reported, but doubtless other woods are occasionally used. The reason assigned by the manufacturer for selecting yellow poplar in preference to all other woods as drum lining is that it is superior to all others when strength, clear stock, lightness, durability, and ease in working are considered. That is exactly the testimony given in favor of poplar by the manufacturers of fine carriage and automobile bodies where curved panels are used.

The oak, maple and holly shells are light-colored; the mahogany, rosewood, and walnut are dark. The different woods are finished in styles which harmonize best with color and figure.

All wooden shells have hoops, which are necessary to give the requisite strength, and to provide fastenings for the heads. The hoops are nearly always of maple, which reaches the factory as planks two and one-half inches thick. The hoops are cut out, dressed, polished and coiled by machines in the drum factory. The Chicago factory, mentioned above, uses 36,000 feet, board measure, of two and one-half-inch maple a year, and 100,000 square feet of veneers of various woods.

The manufacturers of high-grade drums place their names in every instrument sent out. Those who do not know the location of the name would search a long time without finding it. A small hole, usually about a quarter of an inch in diameter is bored through the shell. The hole is usually finished with a nice metal eyelet. It might be supposed that it is for ornamental purposes, but the opening through the shell is for business. If the drum is set in a good light, and a person places his eye near the opening he will see the name of the maker of the drum. It is located on the inside of the shell directly opposite the hole. It is a sort of trade secret, but all drum dealers know how to find the name of the maker.

The hole in the shell answers another very important purpose. If it were not there, the drumhead would be in danger of rupturing when struck. The imprisoned air, if it had no other way to escape, would force out the head opposite the one receiving the blows. The hole through the shell prevents this. Air escapes and re-enters freely, thus keeping the pressure within the drum approximately the same as that outside.

Drums are a somewhat difficult commodity to place on the market. They are exceedingly bulky for their weight. A ton or two will fill a freight car. Railroads charge four times first-class rates for transporting them, and in long hauls this adds much to the retail price; for, as in nearly every other instance, the consumer is the final paymaster. The manufacturer usually sells to jobbers who buy in large quantities, and then distribute to the trade in their respective territories. Chicago furnishes drums to dealers in every state of the Union. California, which is farthest away, is a large buyer. The people on the Pacific coast seem to have a special liking for the drum's characteristic music. The explanation is that the drum is peculiarly an out-of-doors instrument, and the mild winters of the Pacific coast render the drum serviceable the year round. The people of Texas are large buyers of drums, also.

A complete change in the use of drums has occurred in this country in the last century. Formerly the largest demand for drums came from military companies. Every county had its militia. The citizen

soldiers were called together once or twice a year to drill and go through various maneuvers. The drum was indispensable. There must be at least one drum to every one hundred men, and the drummer boy was almost as important as the captain of the company.

That has changed. The old-time musters ceased long ago, and what little drilling is now done is carried out with small use for the drum. As an instrument of martial music it is now a back number.

Another radical change is taking place in the use of the drum. Twenty years ago it was the head and front of every political parade. The flag and the drum led all processions, for all parties. The bigger the drum and the greater the noise it was capable of making, the larger the crowd was apt to be. There was rivalry between different parties and different leaders to create as much enthusiasm as possible, and the drum was relied upon to produce that result. A parade without a bass drum to shake up the surrounding precincts was doomed to failure every time.

That custom is changing; in fact, it has nearly passed away. Politicians now put their dependence in literature, lithographs, and transparencies. The eye is appealed to, rather than the ear. Conspicuous objects are preferred to thundering sounds as creators of enthusiasm in the ranks of voters. Consequently, "the war drum throbs no longer," and the political drum is becoming silent also.

During the late presidential campaign, with three candidates in the field, drum manufacturers thought the occasion was opportune for the revival of the noisy campaign. They attempted to interest the leaders in drums, and pointed to that instrument's proficiency as a kindler of patriotism and a promoter of enthusiasm. The plea fell on deaf ears. The drum was dead, as far as political processions were concerned. A prominent drum manufacturer declared that the last presidential campaign did not increase the sale of drums to the amount of $200 in the whole United States.

From the foregoing it might appear that the sales of drums are decreasing. Such is not the case. New markets have more than made good the loss of old. Musical bands still use drums in as large numbers as formerly; but the new market came in with the cheap nickel shows in the moving picture class. These places of amusement have increased enormously in numbers in recent years. Many of them use drums for advertising purposes—that is, to call attention to the show. Sometimes the drum furnishes part of the entertainment inside the show building. All sizes and kinds are demanded, depending upon the particular service intended.

Sizes of drums vary greatly, and there can scarcely be said to be standard sizes. They usually run from a diameter of twelve inches and a height of four, to a diameter of sixty-five inches and a height of eighteen inches. Few are made of the latter size. That is a very large drum, but some are made full six feet in diameter, though never except upon special orders. Very large drums have no regular sale. They are quite expensive, owing to the extra care required in their manufacture.

A large drum emits the heaviest sound of all musical instruments, and the sound carries farthest. Well-authenticated instances are known where a bass drum has been heard at a distance of eight miles air line. The hoots of few steam sirens will carry that far.

Practically no foreign drums enter the United States. They are excluded by the high duty; consequently, American manufacturers meet no competition except among themselves.



Status of Hickory Handle Business



Aside from the interruption and disturbance caused by floods early in the year, the past season as a whole has been a good one for producing hickory handles. Following the early spring floods there was a season of good roads, resulting in bringing in more raw material than usual, so that handle manufacturers as a rule were able to run full time and to produce enough between that time and closing time for the summer to make up for the loss incident to floods. The producing so far as rough manufacturing is concerned was practically all over by the end of June, and at this writing about all the hickory handle manufacturers are doing is work in the finishing room and in the shipping department.

The season as a whole has been fairly good. Perhaps for those who close their year or half year with the first of July or the first of August the trade will show somewhat larger than for the average year, but they will hardly be on a par with the status of hardwood lumber, because there is neither the extra large volume of demand nor the same percentage of increase in the prices. Hickory handle prices increased some during the year, but not in the same ratio as lumber, and there is a feeling in the trade right now that manufacturers should get more for their product than they have been getting during the past six months, even though the prices for that period have been somewhat above former prices. There has not been enough advance in finished handles to harmonize with the advance in rough lumber.

The export trade, which is usually credited with taking at least forty per cent of our hickory handle output, has been fairly good, taking a little more than the average quantity. One of the disappointing features of the export trade is that it calls for too much hickory in the log and not enough of the finished hickory handles. The exact figures are not available but there are enough in sight to show that there were exported during the fiscal year enough hickory logs to amount to more than $300,000. Added to this there was quite a volume of export in bolts and billets or squares cut to size for handle blanks. There were no separate accountings of these items, but those familiar with the trade know that the English and German trade purchased large quantities of billets for manufacturers abroad. These billets together with the logs made up quite a percentage of the English and German trade, and this same English and German trade would buy many more finished handles if they couldn't get the logs at satisfactory prices. However, even at that the export trade for the season has been fairly satisfactory, and it still looks good.

In the domestic trade for the main part of the past six months there has been a noticeable disposition on the part of the railroads to buy just as little in the way of tools and tool handles as they can get along with. They also manifest a disposition to keep down the amount of improvements and new work. There has been enough, however, with the call from railroads and big contractors and the trade in general to make a pretty good volume of business so that the season as a whole has proven fairly good for handle manufacturers. Perhaps the one point where there is most disappointment is in that the manufacturers have not received proportionate advances for finished handles as have been realized for lumber and timber. They have done very well, though, and are seemingly in good shape to do even better next season. There will not be much hickory handle work done during August, but the indications are that early in the fall busy times will be resumed among the handle manufacturers. Moreover, it is felt that by that time the railroads will be manifesting a disposition to do more construction work and buy more handles. If this happens there will naturally be quite a marked increase in the demand during the fall, and if nothing happens—if things just jog along as they are—the business will be above the average and the year as a whole should round up as a prosperous one for hickory handle manufacturers.

"Meeting together does not make saints of any of us," said a successful hardwood manufacturer, "but the better acquainted we get the less wicked the other fellow seems and the less wicked we act toward him."

It is just as important for the lumber salesman to know the exact cost of transportation to the customer as it is for him to be informed on the market prices of his lumber.

The Shortcomings of Catalpa

The experience of tree planters in the Middle West is demonstrating that many of the claims made by the friends of the hardy catalpa cannot be substantiated. It was formerly held that catalpa would quickly grow to a size large enough for crossties, but it is doubtful if there is a single tie of this species in existence today that was cut from a plantation, though many of them are old enough to have produced tie material if the trees had borne out the claims of the promoters. As a matter of fact, it makes its rapid growth only when young and there is little comparison between the rate of growth of a large tree and that of a sapling. It must now be admitted by all that the only reason for growing the trees is to supply fence posts.



CATALPA PLANTATION IN INDIANA BADLY DAMAGED BY CATTLE WHICH PASTURED IN THE LOT DURING THE WINTER MONTHS. PHOTO BY CHAS. C. DEAM.

The catalpa is not a good tree for a windbreak, as the growth is too open. Plantations cannot be pastured, except possibly by hogs, for cattle will ride down young trees during fly time, and, contrary to the prevailing idea, will eat off the bark. One illustration shows a grove of catalpas that were completely destroyed by Jersey cattle pastured in the lot during the winter months. The cattle were not confined to this lot only, but had access to a woodlot also.

It is also claimed that catalpa is singularly free from disease and insect attacks. In reality the tree is very subject to damage by a shelf fungus that rots out the entire heart and renders the material unfit for any use. It is not uncommon to find a plantation in which the majority of the trees are thus affected. The catalpa sphinx is a moth that eats the leaves and in some instances is so troublesome that the trees can make little if any growth at all. On one plantation in Indiana, which is twenty years old, the trees are only about six feet high, due to the ravages of the moth.

Another claim made is that when a plantation is once started it can be reproduced indefinitely from sprouts. The catalpa does sprout readily, in fact, it sprouts too much, but no trees can be expected to grow from such sprouts unless the entire stand is cut off. Where single trees are cut out of a plantation, the sprouts from such stumps soon die from lack of light.

If one travels over the Middle West he will see many small plantations of catalpa, but it is unusual to find one that is in thrifty condition, with the trees straight and sound. Too many are planted on poor land and make only the most scrawny growth. Catalpa must have good rich soil if it is to succeed. Such lands are not as a rule the kind that should be given over to growing trees, as they are capable of growing more valuable crops.

The result is that when one comes to sum up the whole proposition it is found that the catalpa has only a few good points and an excessive number of shortcomings. It has been extensively advertised and exaggerated and as a result many plantations have been made that will only disappoint. If one has land suited to catalpa and wishes to plant a tree about which there is no uncertainty he had better use our well known black walnut. Where this tree is planted with catalpa it invariably makes the better growth after the first few years, and it has the added advantage of producing a wood of the highest quality and fitted for a large number of purposes. The exploitation of catalpa which was prosecuted so vigorously a few years ago, as though the country's salvation depended on this tree more than any other, has now practically ceased, and the subject has taken its place in history among the fads which periodically come and go.

S. J. R.



CATALPA PLANTATION IN INDIANA IN WHICH THE TREES HAVE BEEN ATTACKED BY CORIOLUS VERSICOLOR; MANY ARE ENTIRELY DEAD. PHOTO BY CHAS. C. DEAM.

New Substitute for Mahogany

A wood from the African Gold Coast has recently been introduced into England, where experiments indicate that it may be treated and stained in imitation of mahogany. The wood appears to have no English name, but is known to botanists as *Triplochiton johnsonii*. It weighs twenty-nine pounds per cubic foot, works easily with machines or hand tools. It is said to be firmer and stronger than yellow poplar. It glues easily and nails well, but lacks natural figure.

The Lumberman's Round Table

A sawmill man who recently put in a Kraetzer preparator said that one of the greatest advantages he expects to derive from its use is in being able to take advantage of special conditions, and change his alignment to meet variations in market and other factors.

"Under the usual mode of operation," he pointed out, "the lumberman cuts his stock without knowing who is going to buy it, or what dimensions will be most in demand by the time it is ready to ship. The result is that frequently he finds that an item which was in great demand at the time he cut it has slumped down to nothing, forcing him to carry a big block of stock on his yard until the pendulum of demand swings back the other way.

"The concern which can ship its lumber thirty days after manufacture can specialize. It can watch the situation and plan its manufacturing operations accordingly. It can make the lumber when the demand for it is good, and ship before the demand has tapered off. In other words, instead of being several miles behind the procession, it will be right up in the band wagon."

* * *

A good many sawmill men overlook a good point in not tagging their piles with the kind, quantity and age of the stock which they contain. For stock-keeping purposes, and also for other obvious advantages, this method ought to be carried out in detail. In the case of the wholesaler, whose piles are usually being taken down and the lumber rehandled rather frequently, tagging the piles would not do much good; but in the manufacturers' yard, where the lumber remains on sticks for several months, it is not only desirable but almost necessary to have the information which is readily conveyed by the simple device of noting the date on the tag when the lumber is piled.

There are plenty of customers who are finicky about the age of their lumber; and it would be a considerable talking point with these buyers to be able to say that every pile is carefully tabulated and that the exact age of every stick of lumber on the yard is known; with the assurance that shipments would be made only when the lumber was thoroughly dry, or had reached the exact age demanded by the consumer.

A good point in this connection would be to have the tags in duplicate, with a full record of the number of piles kept in the office; as shipments were made, the tags on the piles could be turned in and the duplicates checked off, so that at all times the lumberman would have a graphic record before him of the kinds and quantities of lumber in his yard.

* * *

While a good many lumbermen shy at making contracts with consumers for deliveries extending over considerable periods, this character of business is often of the most desirable and satisfactory kind. It goes without saying, of course, that it calls for mutual confidence and the right kind of people at each end of the contract. If either the lumberman or the consumer is the sort of chap who will forget that he has signed an agreement the moment the market changes enough to make carrying it out undesirable, the situation is sure to be unpleasant. But if the seller and the buyer respect their obligations, and continue to move the lumber at the contract price, the seller enjoys the advantage of having a certain outlet for his stock, and the buyer has the assurance that no matter what happens he will get his lumber at the price he figured on when he made up his quotations on the finished goods. It's advantageous from many standpoints—but everybody has to play fair.

* * *

One of the advantages of dimension stock bobbed up a few months ago during the flood season, when a lot of good lumber was greatly reduced in value by having plenty of rich river mud deposited upon it. Lumbermen who were confronted with the task of cleaning this stock and then getting buyers to take it without a discount realized before they were through that they were up against a knotty problem.

Those who were making dimension stock, however, had no troubles at all, comparatively. Of course, they had to clean the lumber before it could be dressed; but after that it was cut up and shipped without anybody being able to say a word on the subject of flooded lumber. That fact made no difference, of course, but the man who had that sort of stock to sell in the rough usually had to make concessions to get people to take it.

* * *

Poplar men who have found the manufacture of siding one of the best methods of moving their stock are also learning that it pays to handle the commodity as carefully as the flooring men do theirs. Instead of tying the bundles of siding with cord, as was formerly the rule, many of the manufacturers are now using wire and making the ties as neat and secure as the hardwood flooring man does in sending out his product. This not only improves the appearance of the stock, but affords a real protection, insuring its delivery without danger of breakage. And as some export business is being handled on siding, the matter of packing is all the more important.

Speaking of poplar siding also calls attention to the fact that those in this business have learned how to move at least part of their waste by manufacturing it into moulding, which seems to bring a better price than lath and most other by-products.

* * *

A hardwood man who recently called attention to the fact that the railroads get more money for transporting lumber than any other coarse commodity also pointed to a condition which ought to be taken into account in figuring the rate.

"If you happen to be a railroad and have a wreck of a train in which there are a lot of cars loaded with livestock," he said, "your losses can be figured down to a cent from the bills of lading of the shippers; because there is mighty little salvage to be gotten out of a wreck of that kind. On the other hand, suppose lumber is in some of the cars, and is dumped out along the track when the big smash-up comes. The chances are that it will be loaded back into the car and shipped on to the customer without anybody ever knowing there was a slight halt in the movement. The insurance feature, as it might be called, is certainly one the railways ought to consider in fixing the charges for handling commodities like ours."

* * *

The possibilities of the planing mill business from the standpoint of the small operator in the hardwood field were interestingly discussed by one of the most successful lumbermen in the country recently. He pointed out that the planing mill man doesn't need big bunches of hardwood stock, and therefore is not in a position to buy carloads of any one item, as he does in the case of pine or cypress.

"What he wants," continued the speaker, "is a few thousand feet of inch quartered oak, say, a little thinner stock; and then plain oak in two or three thicknesses and as many grades. In order to fill a car for him you've got to handle eight or ten different items.

"But that's just what the small man in the lumber business is looking for. He isn't able to pile up a full carload of every kind and grade and dimension of lumber being offered; and when he can move his few thousand feet of each without having to wait for the pile to grow to carload proportions, he has scored a point. I think that if the small wholesaler and the small sawmill man would study the needs of the planing-mill operator in the hardwood line more closely, and then build up a business on mixed cars for this trade, they would find it easier to keep their yards clear of the odds and ends that tie up a lot of money but never seem to be available.

* * *

Large manufacturers of poplar are adopting some of the methods of the yellow pine mills to their own business. For one thing, they have found that the demand for poplar is getting to be a specialized proposition, and that widths must be piled separately. In other words, a consumer doesn't want to buy random sizes any more, as to width, but insists on being able to get the lumber of the size which works into his own requirements most exactly.

Just now, when poplar, as a rule, is pretty dull, it will be noted

that those who are managing to keep their stocks of this wood moving are the wise chaps who have been piling every width, from 6" to 9" especially, separately. They have been in a position to supply a specialty which saves the consumer a good deal of expense in cutting up. Incidentally, the consumer appreciates getting just what he wants the way he wants it, and is willing to pay a bit more than otherwise.

* * *

Some lumbermen seem to believe that the business was created just as it is by the powers above, and that it is near-sacrilege to change its form in any way. When suggestions for improvements in methods are made, or innovations are put forward, their most likely reply is, "Yes, but that's another business." Adding to or taking from present methods is thus made to seem like marring what is already a perfect proposition.

It is this attitude, largely, that explains why many lumbermen have never tried to cut up dimension stock; why they refuse to dress their lumber for those who want to buy it that way; and why they would never kiln-dry their stock even if they knew their business would show a gain through the investment in a dry kiln. Their idea is that the Lord intended the sawmill man to saw lumber and let other fellows do the manufacturing, drying and dressing; and consequently they feel that their duty is done when they have sawed the lumber out of the log and pushed it to one side far enough to be out of the way.

That is an interesting line of reasoning; but the question is, does it conform to the demands of present-day business? Successful concerns are those which stay in the old rut just long enough, and no longer; and it must be remembered that the only difference between a groove and a grave, as somebody expressed it, is in the depth.

Secrets of Success in Lumber Business

A group of successful hardwood men was recently gathered around a dinner table, smoking the cigars which had followed the meal, and incidentally talking shop. One of them finally asked, in a tentative sort of way and in order to start some of the others talking, "What is it, anyway, that brings success in business?"

"Just what do you mean by success?" inquired one of those at the table, a thin-faced, nervous chap, who looked as though he had the energy of a 60 horsepower roadster.

"Well," replied the first speaker, "I don't mean merely average success, the kind that is attained by following the beaten path all one's life; but unusual results, secured in a comparatively short time."

"There's just one answer to that," said a veteran of the trade, emerging from behind a cloud of smoke. "My experience has shown that the man who succeeds must be willing to take a chance on the turn of a card, as it were; to plunge in borrowing and investments; to be willing to sink or swim with developments. I don't mean necessarily to risk everything, but to risk a great deal in a single venture. Most lumbermen, like most other people, shy off from the big chances, and practically everybody in the business can say to himself, 'If I had only done thus and so when I had the opportunity, I would be a rich man today.'

"My biggest successes have been made by being willing to risk something. Business itself is a speculation, you know; and we must be willing to trust to unknown factors to turn out favorably. Setting in your pile and losing means a financial smashup, sometimes, but as I see it there is no way to avoid that if you mean to win the kind of unusual success I am talking about."

"I don't believe I agree altogether with what our friend has said," spoke up a small, wiry chap from the far side of the table. "Of course, a man must occasionally hazard more than he wants to in buying a piece of timber, contracting for the cut of a large mill, and the like. If the timber proves to be of poor quality, or the logging of the tract involves more trouble and expense than has been figured, you lose heavily; or if the market turns against you after the stock you have bought is being manufactured, there is no possible way out of a loss except by holding it and trusting to a swing of the pendulum in the other direction. But I believe in playing safe for the most part."

"That sounds pretty good to me," said another lumberman, who was young in the business but was credited with having won success in no small measure. "Play it safe as long as you can, and then go out and get it when conditions look right. Of course, you may mistake the market and things may break wrong; but you've got to have the lumber to do the business. My theory is that the only way to win in a big way is to have the stock when people want it. You can't make a lot of money on a small turnover these days. That might have been done a long time ago, when sudden rises were more numerous and fluctuations greater. We have now reached a point where changes are more gradual and that means the margin of profit is smaller. In order to make a lot of money you must do a lot of business and have a lot of lumber.

"That means, to me, being a manufacturer and jobber combined. Selling the lumber and then trying to buy it is no longer the paying policy, in my judgment. You've got to have the cards, as the poker players say, when you begin to bet. I found that not being able to take advantage of business offered us, through having insufficient stocks, was our first and worst handicap. Since then I have been a big buyer as well as a big manufacturer of lumber, according to my means, and the further I go the bigger stocks I will endeavor to carry. They may depreciate in value, but in any event I will be able to take care of all the business I can get hold of."

A veteran of the trade, who has several sawmills scattered over the hardwood belt, had been puffing reflectively at his perfecto during the comments of the other lumbermen. He cleared his throat at this juncture and added some of his own views to the symposium that was rapidly being developed.

"My friend over there has the right idea," he said, "but he didn't qualify it at the one point where I would lay particular emphasis. That is in connection with holding lumber too long. Some of the worst mistakes I have ever made have been due to trying to beat the market and get a higher price than was being offered. In that way I accumulated topheavy stocks of certain kinds of lumber and when the price slumped I was finally forced to close out at a big reduction in values. I not only lost the difference between what I could have sold it for and what I actually got, but I also suffered considerable depreciation in the lumber. In spite of all that can be done in the way of proper piling and covering of lumber, it will get black and will show the effects of age if it is left in the pile too long. The stick-marks will show and the general appearance of the lumber will be bad, resulting in a smaller price being paid for it.

"My policy now is to avoid getting long on any one item. I endeavor to trim my stock constantly to keep it well balanced, so that a sudden change in the market will not find me out of line with conditions. This ability to keep your stocks in good shape is likely to be one of the best safeguards of a business, and the cardinal principle of success that I would lay down is, 'Always sell your lumber when it is ripe.'"

At this point everybody turned instinctively, it seemed, to one man who had not yet spoken. He was approaching middle age and had no claims to being a tremendous success. Yet he had a fine, attractive business, the kind that everybody envies. He had only one mill and didn't do much buying on the outside.

He could not be regarded as a "phenom" in the money-making line, and yet he was a splendid type of the successful lumberman.

"What do you think of the success proposition?" someone asked him.

He smiled before he answered, and then he said:

"I find it pretty hard to define what success is. Some people who are regarded as successes may seem to have done little to others, and it is likewise true that the more a man does the more he expects to accomplish in order to reach the pinnacle labeled Success. However, from my moderate accumulation of experience in the business, it seems to me that the greatest feature needed to insure good results is to keep in touch with one's customers.

"This means, first, doing a great deal of selling yourself; second, watching credits as closely as possible, as can easily be done if the owner of the business knows his customers and discriminates in choosing them; and, third, giving the customer what is wanted in the matter of grade. Some customers want lumber at a price without insisting on a strict interpretation of the rules; others need lumber that has to pass a rigid inspection and will pay accordingly. Few salesmen are able to note the facts in this direction properly all the time, with the result that the lumber company makes mistakes, customers are displeased and business is lost.

"I make the rounds of my customers regularly, get to know them and their business, and find it comparatively easy to adapt myself to their requirements, the result being that I sell to firms which are good pay, get just what they want and pay good-to-excellent prices for their lumber. If I have made a success, it is because I have looked out for this point."

"Gentlemen," exclaimed the leader of the discussion, who had started the talk by asking the question, "I am forced to the conclusion that a successful lumberman has to come pretty near to being a genius, judging from what we have been saying. He must know how to buy timber and lumber, how much stock to carry, how and when to sell, how to handle his men and his customers, when to take a chance and when to sit steady in the boat. He must be a great executive, a real financier and have intuition enough to tell him when he is treading on dangerous ground. He must be able to get a good price, but not too good, because his product is graded accordingly; he must know how to sell poor lumber and make his customers like it; how to manufacture and how to yard; how to choose customers and how to avoid bad credits; in other words, he must be a manufacturer, a banker and a wizard of sales, all rolled into one."

"That being the case," said the unofficial chairman of the meeting, pushing back his chair and raising his glass, "I propose a toast—in Apollinaris, of course—to the man of the hour, the successful hardwood lumberman!" G. D. C., Jr.

Definition of Carload

Regarding the above caption the Lumber Law Review says that practically every lumberman has at some time or another received orders calling for "one car of lumber" and after the shipment had gone forward, received notice that the car had been rejected on the ground that it was overloaded. As a general rule an adjustment is made with the customer without litigation, and during the negotiations the lumberman revolves in his mind the question of "when is a carload not a carolad?"

A case was recently reviewed by the Supreme court of North Carolina in which a definition is given of "a carload." The subject matter was not lumber, but practically the same reasoning and rules would apply in either case. The Elba Manufacturing Company, defendant, purchased from J. G. Layton, plaintiff, at the price of fifty-seven and one-half cents (57½c) per bushel, three carloads of cottonseed to be shipped by rail f. o. b. from Dunn, N. C., plaintiff's home and place of business, to Maxton, N. C., where defendant's mill is located. Two of the carloads were accepted and paid for by defendant, and the dispute arises as to the third car. Each of the first two cars carried 59,008 pounds of seed, in round numbers, while the third car was loaded at Dunn, with 78,800 pounds. At Fayetteville, N. C., while the last car was en route to Maxton, 29,000 pounds of seed were taken from it and placed in another car. This lot, on arrival at Maxton, was accepted by defendant. The other car which contained the remainder of the seed. the defendant refused to accept on the ground that the car had been purposely overloaded in order that plaintiff might get the benefit of the contract price for more seed than the defendant had agreed to buy.. And, by the way, the price of seed had declined in the meantime. The defendant offered to pay for the 29,000 pounds of seed at the contract price, which plaintiff refused to accept. There was evidence that a carload of cottonseed, as understood in railroad and business circles, ranged all the way from 20,000 pounds to 75,000, or even 90,000 pounds. Plaintiff testified that he had shipped a number of cars of seed containing 80,000 pounds and some 90,000 pounds. It was testified that the rated capacity of the last car, No. 40018, in which the 78,800 pounds of seed were shipped, was 60,000 pounds, but that the maximum quantity allowed by the railroad company's rules, to be transported in it, was measured by its capacity, or 60,000 pounds plus ten per cent thereof, or 66,000 pounds in all. There was other evidence as to the rules and custom in loading cars with reference to what is considered a carload, and all of the evidence was submitted to the jury with an instruction to find what was an ordinary and reasonable carload, according to the usage and customs and understanding of railroad companies and shippers.

A verdict was rendered for the plaintiff and the defendant appealed to the Supreme court of North Carolina. The learned North Carolina justice referred to a federal case under the style of Bullock versus Finley in which the court applied the rule with reference to this very term "carload."

The court quoted the federal decision, which was as follows:

"If nothing was agreed as to the quantity to make a carload then the usual and established custom as to quantity in that business and trade at the time and place of the contract, would fix the quantity meant by a "carload," between the parties; and if no such usage or custom is shown, then what a car of usual capacity used in carrying such freight, could carry, would fix the quantity intended by the party. In ascertaining what was meant and understood as to quantity, you must consider all the circumstances connected with the transaction between the parties disclosed in the evidence."

Forest Work in Pennsylvania

The Pennsylvania Department of Forestry has issued its tenth annual announcement of the work done by the Forest Academy at Mont Alto, in that state. The academy is a school founded for the purpose of educating foresters who would be competent to take charge of the state's wooded lands and administer them. The state owns more than a million acres of such lands. Some were in wretched condition when title passed to the commonwealth. They had been logged and burned until their present value was practically nothing, and their prospective value was problematical. That was ten years ago. Trained men could not be found to take charge of the work, and the state founded a school to train men. It was equipped with apparatus and appliances, and competent foresters were secured as instructors.

Fifty-three men have been graduated and fifty-one are in the state, in either public or private forestry work, one is dead, and one is in the United States Forest Service. Pennsylvania has used good judgment and has obtained results.

New Farmers' Alliance Needed

ARTICLE TWO

No man knows the value of crops in the United States that rot for the want of shelter. Although the value is unknown for the reason that its nature is such that it cannot be measured, it is well known that the amount is very large. It is a waste which does nobody any good, and it might be prevented to a large extent. The loss from this source will decrease as barn room increases, because the damage is almost wholly due to the rotting of grain and forage crops left in the fields without shelter.

Fifty years ago, and even longer than that, the prosperity of Pennsylvania farmers was proverbial, and, almost without exception, those who referred to the prosperity of the farmers spoke at the same time of the large barns which were prominent features of the farms. The sturdy farmers of the Keystone state were often criticized because they built large barns and lived in small houses. That criticism was oftenest heard by travelers from the South, because in the South the opposite was the rule—large residences and no barns at all, except shelter for some of the best horses. An example of this, and a typical example it was, might be seen on the estate of General Washington at Mt. Vernon, Va., where he lived in a house of twenty-four rooms, while his barn would not hold more than three or four tons of hay. The house and the barn still stand as illustrations of the contrast between Pennsylvania and the country south of the Potomac in the matter of sheltering farm crops.

In course of years the Pennsylvania farmers grew rich on what they saved by sheltering their hay and grain. That is the logical explanation of their prosperity. Their land was no richer than the Virginia lands south of the Potomac, but while the latter deteriorated from generation to generation, until large tracts were abandoned, the Pennsylvania farms, with their barns large enough to shelter everything, increased in fertility and the owners continued prosperous.

These two states, Pennsylvania and Virginia, are named as examples. It is not claimed that Pennsylvania was better than all other states, or that Virginia was worse than all others, in the matter of taking care of what they raised; but the two policies are illustrated, and that is the point to be made.

The farmers of the United States are still divided into the two camps, and state lines may be utterly ignored in making the application. The traveler through almost any section of the country can see for himself the two methods side by side. One farm will have its ample barns, large enough to shelter all the crops. The fields are clean and look fine. The next farm may be sadly in need of roofs to shelter the hay and grain. The crops are left out of doors, shocked, ricked, and stacked in various kinds of heaps, but all of them whipped by wind, beaten by rains, or flattened under the weight of the winter's snows.

This is a picture common in practically all parts of this country. The crops are left out of doors for weeks or months. In some of the semi-rainless regions of the West no serious injury follows, because the dry weather lasts long enough to permit the threshing and marketing of the grain; but east of the Rocky Mountains the summers and autumns have periods of rain, and every rain that falls on grain or forage, after it is harvested, depreciates its value.

Grain stacks, after periods of rain, are often green with sprouts. Not only is the grain itself spoiled, but the straw is rotten. In some parts of the country, and in unfavorable seasons, the loss is very great. If the damage from that cause were confined to a single farm, or a single county, or even to a single state, it would be less serious; but it extends over dozens of states and is enormous in the aggregate.

The hay crop suffers immense deterioriation through decay. It is customary to stack this product out of doors. Farmers who would not think of leaving their wheat and oats exposed to the weather, often overlook the great injury caused to their hay by long exposure to rain and snow. The stacks contain from two to five tons each, and by the middle of winter the entire surface of the stack is rotten. It is thrown away, and the undamaged hay is scattered on the meadow for the cattle to eat and walk over.

That was the old way of doing it, and unfortunately the old way still continues in many parts of the country, and among farmers who would resent being told that they are not progressive.

An enormous loss results from the rotting of corn fodder. It is not customary to store fodder in barns. It is bulky and heavy, hard to haul and difficult to handle. For that reason it is generally left in the field until winter and it is then dragged from beneath the snow and thrown to the cattle. They eat such of it as is fit, and trample the rest.

Many farmers who grow large acreage of corn believe that it would not pay to house fodder, because of the amount of barn room required. Corn fodder is the coarsest of the forage crops of this country, and that fact has had much to do with the custom of leaving it in the fields where a high percentage of it is lost by decay before it is fed to stock.

The belief that roofs to shelter fodder are not profitable is a fallacy, which has come down from past times when many things were believed which are now known to be erroneous. It is close akin to the former fallacy that it did not pay to feed hogs—that they should be left to root for a living and pick up such nuts as they could find in the wood, and then make pork of such as had not starved to death. That belief is now a thing of the past. It pays to take care of hogs, and it will pay to take care of corn fodder. It is a coarse crop, but it is worth millions of dollars, and is too valuable to leave in the fields



GENERAL WASHINGTON'S HOUSE OF TWENTY-FOUR ROOMS AT MT. VERNON, VA. IT FORMS A REMARKABLE CONTRAST WHEN COMPARED WITH THE INSIGNIFICANT SIZE OF THE BARN



GENERAL WASHINGTON'S BARN STILL STANDING AT MT. VERNON, VA. IT HAS STALLS FOR SIX HORSES AND ROOM FOR TWO WAGON LOADS OF HAY. THE PLANTATION CONTAINED 8,000 ACRES.

until it is half rotten. What it needs is a roof, and it will be found that few forage crops will pay more handsomely for the roof that covers them.

The field crops of the United States run into billions of dollars a year. Practically every ton of the miscellaneous products that make up the total should be sheltered from the weather as soon as it is harvested. The table which follows summarises these crops and gives their estimated value for a single year.

VALUE OF CERTAIN FIELD CROPS IN THE UNITED STATES FOR THE YEAR 1909

Corn	$1,438,553,909
Hay and forage	824,004,877
Cotton	703,619,303
Wheat	657,656,801
Oats	414,697,422
Barley	92,458,571
Rye	20,422,812
Buckwheat	9,330,592
Miscellaneous	1,328,255,713
Total	$5,487,000,000

As stated in a foregoing paragraph, it is not known how much of the total annual crops in this country is lost on account of decay due to weather exposure. It has been estimated as high as ten per cent. It is unquestionably that high in some regions, but probably under it in others. If it is placed at no more than five per cent, it means a deplorable loss. It would exceed $250,000,000 a year.

Figures do not mean much unless they are applied. That sum (saved every year) would build a dozen dreadnaughts; it would pay for the Panama canal in two years; it would provide, three times over, the sum asked for the Newlands bill to improve and control all the rivers of the United States; it would build eight splendid country roads from the Atlantic to the Pacific.

The farmers of the United States can save most of this waste by building more barns and shedroom for storing crops in the dry. That is enough money to buy (at mill value) one-third of the lumber cut in the United States.

After all the theory is squeezed out of this proposition, it is evident that one of the safest and surest means whereby the farmers can increase their prosperity is to build more barns for housing their grain and forage crops. The savings in a few years will suffice to build the barns. It can hardly be expected that the reform will be taken up along the whole line at once and executed promptly. It will take time; but it is certainly a field for economists to exercise their talents. Farmers' institutes listen to lectures on nearly every other topic of saving and conservation except that of more roofs. There are talks on soil erosion, the succession of crops, soil leaching, the fixation of nitrogen, fertilizers, and scores of other interesting and highly useful measures; but too little attention is paid to saving the crop after it is raised. The best timothy hay in the country will rot just as soon, if left in the rain, as the coarsest crow's foot or Johnson grass, and fodder of the finest strain of pedigreed corn will deteriorate fully as fast in the field as the poorest specimens grown on beech flats and huckleberry ridges.

Improvement of crops is a great work, but saving the crops after they are raised is no less important. Here is where the farmer should form an alliance with the lumberman. He should study the roof question as carefully as he studies the care of soils or the improvement of grains. In no other way can he put money into his pocket so surely and so safely, and no other person is so well equipped to help him do it as is the lumberman.

West African Mulberry Woods

The West African mulberry (*Chlorophora tenuifolia*) is very abundant in the forests of St. Thomas and Togo in West Africa, where it grows to enormous size. Its native name is amoreira, which is the Spanish or Portuguese name for mulberry. The colored people of West Africa call it mucumba. The tree is found over the entire island of St. Thomas, to the elevation of 2,500 feet, where fully developed trees are sometimes one hundred twenty feet in height and about seven feet in diameter at the base; the average height is about eighty feet and the average diameter about four feet. So large are these trees that the natives make out of the trunks large boats, some of which have dimensions of 50 by 4½ by 5½ feet. One boat in particular, measured by a recent traveler in West Africa, was forty-two feet long and a little over five feet in height. This boat had provision for twelve oars.

The wood is very hard and durable and reminds one of the Brazilian wood known under the name of vinhatico (*Echirospermum elipticum*), used so extensively in naval construction. The specific gravity of this wood is .576, which is somewhat higher than that of our white oak. In St. Thomas and on the mainland of West Africa this wood is usually converted into boards which are suited especially for construction work and for interior finish, flooring, and carpenter work. It is moderately light, easily worked, and not liable to rot. The wood does not burn very readily; a board may be laid upon a fire and a hole will be burned through without a flame. In its green condition the wood has a light color, but after it is thoroughly seasoned it becomes yellowish-red, with dark wavy streaks. These streaks become more prominent after the wood is polished. It is very durable when subjected to the weather, and it is said to be entirely free from the attacks of white ants, which are so destructive to wood in the tropics. The bast or inner bark of this tree produces a latex, which is used for making linen waterproof.

Another species of this genus is the *Chlorophora excelsa*, which is a very common and valuable tree in West Africa from Togo to Angola. It has been used from time immemorial by the natives and the colonists as a building material. Like that of the mucumba the wood is at first white or pale yellow, but upon exposure becomes darker and exhibits numerous irregular or wavy dark lines. It is hard, durable, and entirely free from the attacks of white ants. The tree is found not only in West Africa, but botanical explorers have seen it in Central Africa as well, and it is said to be plentiful in Usambara, in German East Africa. The natives of Angola call this tree mucamba, or camba, but in the trade it is known as roko, iroko, or odum. The trees is easily recognized in the forests by its great height, because it is frequently seen one hundred twenty-five feet high and from six to ten feet in diameter near the base. The trunk is cylindrical and has a rather smooth gray bark. It is nothing unusual to find trees with clear boles for sixty or more feet.

Timber cut from these species has been exported only in small quantities to Europe, generally under one or the other of the two comprehensive trade names of West African mahogany or West African cedar. Thus far such shipments have met with rather scant encouragement in the English markets. The good properties are well recognized and appreciated, however, in West Africa, and it will be a matter of only a few years when both of these woods will have a well established market in Europe. As soon as a good demand for this timber arises in the large markets the supply will be found to meet almost any call made on it.

L. L. D.

Good, hard work is one of the best things in the world to make a man wholesomely happy, and whether work is shouldered as a burden or taken to as a pleasure, is more a matter of whether it is taken up voluntarily or whether one is driven to it than anything else.

A lot of furniture wood may come in from the Philippines, but it hasn't come yet. Reports for last fiscal year show that we imported cabinet woods from there to the value of $25,264, and during the same time we exported to them logs and round timber to the value of $31,287, to which we added lumber, shooks, etc., to the value of $326,610.

The fellow who has been theorizing on the subject of making thin hardwood flooring with a veneer saw was surely either hard up for subject matter, or else he is a stranger to the work that can be done with a modern band resaw.

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 545—Regarding Greenheart

Washington, D. C., Aug. 26.—Editor HARDWOOD RECORD: We have an inquiry for some greenheart, to be used where great strength and durability is required. Can you tell us where it comes from and where we would be likely to obtain a sample?

Your reply will oblige us. We think it grows in West Indies.

———.

The above correspondent has been advised that mature greenheart wood has very remarkable lasting qualities. Authentic records show that the best grades surpass iron and steel in durability when placed under water or in contact with the soil. Sapwood and immature trees have very little to commend them for lasting qualities.

The chief range of growth of this wood is in British Guiana, although it abounds in other sections of the north end of South America, and to a limited extent in the West Indies. The timber is exported almost exclusively to Liverpool and New York.

Incidentally, the woodwork of the locks of the Panama canal are constructed of this material.

This inquirer has been referred to a source of supply for this wood.—EDITOR.

B 546—Seeks Services Timber Cruiser

St. Marys, O., Aug. 28.—Editor HARDWOOD RECORD: Can you commend to us a first-class timber cruiser to do some work in the course of the next month or six weeks in West Virginia? ———.

The name and address of a competent cruiser for work in West Virginia hardwoods has been supplied to this concern.—EDITOR.

B 547—Seeks Soft Maple

Detroit, Mich., Aug. 27.—Editor HARDWOOD RECORD: We are in the market for 250,000 feet 2" No. 2 common and better West Virginia soft maple. Will appreciate the names and addresses of West Virginia manufacturers who get a considerable amount of soft maple in their cut.

———.

The writer of the above letter has been supplied with the names of a few concerns who would likely be interested in his requirements. Any others interested can have the address on application.—EDITOR.

B 548—Seeks Lumber Law Book

South Bend, Ind., Aug. 25.—Editor HARDWOOD RECORD: Will you kindly advise me whether there is a publication available which gives the laws in the different states as affecting the lumber business? Think I have heard of a book published which gives a resume of the laws of different states. Any information you can give me in this connection will be greatly appreciated. ———.

The writer of the above letter has been advised that we do not know of any such publication as he has in mind, save several sundry works that give a resume of the lien laws of various states.—EDITOR.

B 549—Seeks Market for Pole Stock

Necedah, Wis., Aug. 20.—Editor HARDWOOD RECORD: Will you give me the names of some firms who are buyers of jack pine, soft maple and birch poles, ranging in length from 14' to 30', having a diameter from top down to 3". ———.

The writer of the above letter has been supplied with a brief list of buyers of the material sought. Any others interested can have the address upon application.—EDITOR.

B 550—Seeks Hardwood Dimension

Preston, Ont., Aug. 28.—Editor HARDWOOD RECORD: We can use carload lots in any variety of cheap hardwoods 2x2x24" or longer. Can you refer us to a probable supply? ——— COMPANY.

The writer of the above letter has been given a brief list of dimension producers. Any others interested in the inquiry can have the address upon application.—EDITOR.

B 551—Wants Employment for Forestry Graduates

Mont Alto, Franklin Co., Pa., Aug. 20. Editor HARDWOOD RECORD: You will recall that I am a graduate of the Biltmore Forest School, and since my graduation have been an instructor at the Pennsylvania State Forest Academy. Up to the present time we have placed all our graduates with the Pennsylvania State Forestry Reservation Commission. Owing to the insufficient appropriation of the last legislature, the commission found it necessary to drop eight of the foresters. Two of these are real energetic and active young men and are now seeking employment. They have solicited my aid in obtaining it.

I take the privilege of writing to you and inquiring if you know of any position that these young men might possibly fill. They prefer employment temporarily as timekeepers, scalers or inspectors. Our institution and the Biltmore Forest School are considered the two most practical schools of forestry in the country, and most of these young men have had very good preliminary training. J. S. ILLICK.

State Forest Academy, Pennsylvania Dept. of Forestry.

Anyone seeking the services of a couple of live young men about their lumber operations, could probably do no better than to communicate with Prof. Illick concerning the young men to whom he refers.—EDITOR.

B 552—Seeks Cottonwood

St. Louis, Mo., Aug. 22.—Editor HARDWOOD RECORD: Up to the present time we have been unable to secure a sufficient quantity of dimension sawed cottonwood to meet our requirements, and have concluded to purchase a considerable quantity of firsts and seconds clear cottonwood in the rough, which must be kiln dried to suit our requirements.

——— COMPANY

Anyone interested can have the address on application.—EDITOR.

B 553—Seeks Kraetzer-Cured Gum Box Boards

Cincinnati, O., Aug. 29.—Editor HARDWOOD RECORD: We have a customer who uses quite a quantity of 41x13 to 17" gum wagon box boards. He is very anxious to try some of the Kraetzer-cured lumber. Would like to have you send us a list of mills who have installed the Kraetzer Preparator, as we would like to purchase additional quantities of lumber cured by this process beyond our present sources of supply.

——— & Co.

The foregoing is from a leading Cincinnati wholesale house. It has been supplied with the names and addresses of concerns who have installed Kraetzer Preparators, and are drying lumber by this process.—EDITOR.

B 554—Seeks Dogwood

Paterson, N. J., Sept. 3.—Editor HARDWOOD RECORD: We are in the market for dogwood for immediate shipment. Please advise us the names of manufacturers of this wood. ——— SUPPLY COMPANY.

The writer of the above has been supplied with a list of dogwood manufacturers so far as our information service reveals the information. Any others interested in the inquiry can have the address on application.—EDITOR.

B 555—Wants White Holly

New York, N. Y., Sept. 3.—Editor HARDWOOD RECORD: We are in the market for a car of 4/4 holly. If you know anyone having such a car kindly advise us. ——— LUMBER COMPANY.

The writer of the above letter has been supplied with a list of such while holly producers as we have listed in our Information Service. Any others interested in the inquiry can have the address by asking for it.—EDITOR.

B 556—Seeks Employment in Lumber Yard

A young Canadian of fine education, with first-class endorsement for ability, integrity and willingness to work, seeks employment, preferably out-of-doors, with a lumber manufacturer or wholesale yard concern.

Anyone interested in negotiating for the young man's services can have the address on application.—EDITOR.

B 557—Interested in Lorac

Townsend, Tenn., Sept. 5.—Editor HARDWOOD RECORD: We are advised that there is a preparation on the market by the name of Lorac used for painting the ends of logs and lumber to eliminate checking. Will appreciate it if you will advise us of your opinion of the material and where we can purchase it. Also if you know of any preparation better than this LITTLE RIVER LUMBER COMPANY.

The writer of the above letter has been advised that we know of no material better than Lorac for the purpose named, and the address of the manufacturer is The George Henke Company, 68 Beekman street, New York, N. Y.—EDITOR.

B 558—Has Apple Trees for Sale

Lo Lo, Mont., Sept. 4.—Editor HARDWOOD RECORD: I have about fifty acres of old apple trees that I am going to pull out this fall, and am desirous of finding a market, if possible, for this wood.

———

The writer of the above letter has been referred to several saw manufacturing houses who employ applewood in the manufacture of saw handles.—EDITOR.

B 559—What Is Just Commission?

Montgomery, Ala., Sept. 6.—Editor HARDWOOD RECORD: Agreeable to arrangement with a wholesale concern we accepted an order recently and made a shipment of one of its orders, which according to terms of order would have amounted to $750. Complaint being made of the quality of the lumber, an allowance of $50 to the buyer was made on the sale. Do you consider the commission man entitled to commission on $750 or $700?

——————— LUMBER COMPANY.

If the contract with the commission house contemplated a specific commission on net avails of sales, it would be entitled to a commission on $700 rather than on $750. On the contrary, if the contract, provided for commission on the sale regardless of subsequent settlement, the commission man would be entitled to a commission on the entire amount.—EDITOR.

Clubs and Associations

Meeting of Commissary Managers

The National Commissary Managers' Association held a three-days' session at the Planters hotel, St. Louis, Aug. 19, 20 and 21, and carried out a program of discussion which included numerous topics with which the members were closely concerned. The president, T. R. Crumpler of West Virginia, was unable to attend, and C. C. Jackson of Arkansas served as acting president. Mayor Henry W. Kiel of St. Louis delivered an address of welcome, to which Mr. Jackson responded.

These preliminaries having prepared the way for business, the serious work of the association was at once taken up by the reading of the secretary's report. The matter of general interest in it was the rapid growth of the organization in the three years of its existence. It was organized at Baltimore with nine active and two associate members. A year later its roll contained 450 active and 150 associate members, and at the late meeting the list contained 1,143 store managers and 146 associate members.

The discussion occupied the chief part of three days, and was devoted to half a dozen leading topics, among them being the best arrangement of the store, and the display and care of merchandise; the cost and profit, with many factors which are apt to worry and confuse; the way credits should be handled, and the solving of difficult problems constantly coming up in that department of the store; handling cash sales, and the related subject of coupons, metal checks, and the cash register and cash carrier systems; losses and leaks, with many puzzling and disagreeable features connected with that phase of the case. The selling end, which came up for consideration late in the meeting, was in many ways the principal topic. The comparative merits of wooden and fiber boxes came in for extended discussion, without any decision being reached. The election of officers resulted in the following:

PRESIDENT—C. C. Jackson, Graysonia, Ark.
SECRETARY—Tracy D. Luccock, Chicago.
PACIFIC COAST VICE-PRESIDENT—G. A. Musson, Weed, Cal.
CENTRAL VICE-PRESIDENT—F. M. Meadows, Pineville, Ky.
SOUTHERN VICE-PRESIDENT—Herbert Moss, Manning, Tex.
NORTHERN VICE-PRESIDENT—John I. Bellaire, Blaney, Mich.
SOUTHEASTERN VICE-PRESIDENT—A. W. Dowling, Belfast, Ga.
EASTERN VICE-PRESIDENT—J. Milton Bailey, Penland, N. C.

The following members of the advisory board were appointed to represent their several states:

Alabama—A. M. Phillips, Altoona.
Arizona—F. A. Sanderson, Clifton.
Arkansas—E. L. Harley, Warren.
California—C. S. Sharpe, Bulwinkle.
Colorado—D. T. Givens, Bowen.
Florida—A. Adkisson, Pine Barren.
Georgia—J. F. Graddy, Cecil.
Idaho—Frank G. Pickford, Hope.
Illinois—Roy Lockridge, Christopher.
Indiana—Clark Whitman, Littles.
Iowa—O. L. Canning, Hiteman.
Kentucky—G. B. Carter, Princess.
Louisiana—J. C. Ziegler, Clarke.
Maryland—L. K. Dellinger, Dodson.
Michigan—H. A. MacMillan, Jenson.
Minnesota—E. D. Alger, Tenstrike.
Mississippi—F. M. Young, Lucedale.
Missouri—C. C. Mathews, Garwood.
Montana—Thos. McCluskey, Radersburg.
New Jersey—J. W. Walters, Franklin Furnace.
New York—George A. Helms, Tamosassa.
North Carolina—S. B. McGill, Bowdens.
Ohio—Frank R. Anderson, Columbus.
Oklahoma—E. D. MacLeod, Bismarck.
Oregon—H. W. Stanley, Wendling.
Pennsylvania—C. Z. Wilson, Morgan.
South Carolina—L. Brinkley, Georgetown.
Tennessee—Alvis J. Carr, LaFollette.
Texas—W. J. Holland, Waterman.
Virginia—J. B. Jackson, Austinville.
Washington—W. H. McCauley, Mukilteo.
West Virginia—J. P. Minear, Harding.
West Virginia—D. H. Hopkins, Powellton.
Wisconsin—Fred Tucker, Hiles.
Wyoming—E. B. Treat, Cheyenne.

The contest for place of meeting in 1914 was between St. Louis, Cincinnati, Chicago and Louisville. After the first ballot St. Louis and Cincinnati were dropped. On the second ballot the vote showed that Louisville was the choice of the convention for 1914.

Meeting of Evansville Lumbermen's Club

The first fall meeting of the Evansville, Ind., Lumberman's Club was held at New Vendome hotel, Tuesday night, Sept. 9. There was a business session, a banquet, and good fellowship prevailed. Most of the lumbermen had returned from their summer vacations. D. B. MacLaren of the D. B. MacLaren Lumber Company, is president, and George O. Worland secretary.

Houston Lumbermen Organize

The Lumberman's Club of Houston, Texas, has been granted a charter to run fifty years. An election of officers resulted in the choice of B. F. Bonner, president, J. M. West, vice-president, and Earl Dionne, secretary.

A committee was appointed on conservation of forests, as follows: J. Lewis Thompson, chairman; S. F. Carter, John H. Kirby, H. S. Filson and A. L. Ford.

The purposes of the club include the acquisition and dissemination of knowledge, facts, and statistics concerning the lumber industry, and the protection and preservation of the forests.

Nashville Club Postpones Meeting

Owing to the fact that several of the members of the Nashville Lumbermen's Club are out of town on their vacations and that there would necessarily be more or less irregularity in the attendance of the members for the next several weeks, President C. M. Morford has announced that there will be no further meetings of the club until the first Tuesday in October, when the weekly luncheons and business meetings at the Commercial Club will be again resumed.

Memphis Lumbermen Plan Outing

The Lumbermen's Club of Memphis has arranged a boat excursion on the Mississippi for the evening of Sept. 11, which will be attended by a number of the members, their wives, daughters and sweethearts. This boat excursion has become an annual feature of the entertainment programme of the club and it is looked forward to with a great deal of pleasure. There are still a number of lumbermen who have not returned from their vacations but it is anticipated that there will be quite a number on the excursion. The entertainment committee, headed by F. E. Stonebraker, has arrangements in charge and preparations have been made for refreshments, music and dancing.

Logging Congress

The Pacific Logging Congress, of which E. P. Blake of the Washington Log Brokerage Company, Seattle, Wash., is president, and George M. Cornwall, Portland, Ore., secretary, has sent out its tentative program for the fifth session of the organization to be held at Spokane, Wash., Sept. 24-27. Numerous good topics relative to efficient logging, logging systems, cableways, methods of teaching logging engineering, etc., etc., have been assigned to experts in the subjects treated, to be delivered at the sessions.

The entertainment committee has provided a very attractive program, including a banquet, automobile ride, welfare dinner, and a day's trip to Elk River, Idaho, visiting the electrically driven sawmill and logging camp of the Potlatch Lumber Company.

Wisconsin Cut and Shipments

Secretary R. S. Kellogg's report of the cut and shipments of the Northern Hemlock & Hardwood Manufacturers' Association for July, 1913, shows that during that month 25,617,000 feet of all varieties of hardwood were sawed, and 30,086,000 feet shipped. This report indicates a decrease of over 10,000,000 feet in cut and a slight increase in shipments over June.

With the Trade

Receiver for the Maley, Thompson & Moffett Company

As a direct result of the sudden death of Thomas J. Moffett at the Hotel Emory, Aug 28, who was president and treasurer of the Maley, Thompson & Moffett Company, hardwood lumber and veneer manufacturer of Cincinnati, O., the business of that concern was thrown into the hands of a receiver in the insolvency court, Saturday following his death. Attorney Frank H. Shaffer of the law firm of Peck, Shaffer & Peck was named as receiver. The action was the result of a suit filed by Edward J. Robbins, vice-president of the company, who sued as the owner of more than half of the capital stock and as the surviving partner of the Moffett & Robbins Company, which is a creditor of the Maley, Thompson & Moffett Company to the extent of $85,000. The petition states that the Moffett & Robbins Company was operated conjointly with the Maley, Thompson & Moffett Company and that the affairs of the concerns are now at a standstill and somewhat muddled up on account of Mr. Moffett's death, as he had full charge of the financial affairs of the companies and the members of the board of

directors are not able to manage the affairs of the concern and conserve it in the interest of the creditors. The receiver states that as far as he has been able to learn the concern is solvent and has assets estimated at $200,000.

Will Log Pennsylvania Land

A tract containing from 15,000,000 to 18,000,000 feet of yellow poplar, oak and hemlock in Ligonier valley, Pennsylvania, will be logged by the Ligonier Lumber Company, recently chartered at Connellsville, Pa. A band mill is being moved from West Virginia to that place to do the work. The company owns other valuable tracts of timber in the vicinity.

A New Wholesale Company

The Stillwell, Moore & King Lumber Company has been incorporated under the laws of Illinois, with an authorized capital of $200,000, and has opened offices at 501 McCormick building, Chicago. The company will handle both hard and soft woods by wholesale. The officers are Addison Stillwell, president; W. C. King, vice-president, and T. A. Moore, secretary.

Will Build Another Mill

The Mansfield Hardwood Lumber Company, with headquarters in Shreveport, La., and which concern operates large hardwood sawmills at Mansfield and Winnfield, La., is preparing to build another plant at Winnfield. This new plant will be a band mill of from 30,000 to 40,000 feet daily capacity, the machinery for which will be furnished by the Sinker-Davis Company of Indianapolis. Construction work will be commenced upon this plant at once, and it is expected that it will be completed and in operation by Jan. 1.

The building of this second plant at Winnfield is rendered necessary by the fact that Mansfield Hardwood Lumber Company contracts to take all of the hardwood timber off the holdings of the Tremont Lumber Company as it is delivered, and the company also has limited timber leases upon other hardwood stumpage. The capacity of the original mill was insufficient to manufacture this stumpage as fast as delivered.

Buettner-Meeker

Edwin W. Meeker, associate editor of HARDWOOD RECORD, was married on Saturday, Aug. 23, to Miss Nita Buettner, daughter of Dr. and Mrs. Adolph Buettner. Dr. Buettner up to the time of his death, about three years ago, was prominent in medical circles in Chicago, practicing mainly on the north side, where the family has lived for the past twenty-five years and is well known.

Mr. Meeker, who is popular among the trade, is a graduate of Dr. Schenck's Biltmore Forest School, and is a son of E. J. Meeker of New York and East Orange, N. J.

The bride and groom are spending a few weeks at New York and the New Jersey coast, and will be at home after Oct. 10 at 926 Airdrie Place, city.

HARDWOOD RECORD and the local contingent extend to Mr. and Mrs. Meeker their congratulations and best wishes.

Clarence Boyle, Inc.

The above title is the style of a recent addition to the many Chicago wholesale lumbering concerns, the head of which organization is Clarence Boyle, a veteran of high standing in the hardwood field here, having entered the local market in 1881.

The new company was incorporated on August 18 last with a capital stock of $10,000, by Mr. Boyle, Maurice F. O'Connor and Milton O. Nara more, and its offices are located at 312 Portland Block. Mr. O'Connor is connected with Armour & Co., this city, and will not be actively interested in the new firm of Clarence Boyle, Inc.

Mr. Boyle is a graduate of the Butler College, Indianapolis, Ind., of the class of '83. Immediately after his graduation in 1883 he stepped into the lumber business, acting as salesman for his father under the style of L. V. Boyle & Sons, Chicago, for a good many years thereafter.

For many years and up to a short time ago, Mr. Boyle was connected with the firm of D. K. Jeffris & Co., this city, more recently in the capacity of sales manager.

Mr. Boyle's past record shows he has been a success in the lumber business, and everything points to his continued prosperity.

Death of Thomas J. Moffett

Thomas J. Moffett, president and treasurer of the Maley, Thompson & Moffett Company, Cincinnati, operating a sawmill and veneer plant at Cincinnati and a mahogany sawmill at Havana, Cuba, died suddenly about six o'clock in the evening of Aug. 28, at the Hotel Emery, Cincinnati. The cause of Mr. Moffett's death was heart disease. Mr. Moffett had just returned to the city from a business trip and being taken suddenly ill on the street, secured a room at the Hotel Emery and called a doctor. Death closely ensued following the arrival of the physician. Mr. Moffett is survived by his wife, two daughters and one son.

Mr. Moffett was born in Edinburg, Ind., Dec. 30, 1864. He was educated in the public schools of that town and was graduated with honors. As a youth he was employed in a drug store, and later went to Philadelphia, where he entered the Philadelphia College of Pharmacy, the leading institution in that line in the country at that time. He graduated from that college and returned to Edinburg and engaged in the drug business with his two brothers. Later he removed to Dayton, O., and bought an interest in the lumber firm of Maley, Daniels & Thompson, and the firm then became Maley, Thompson & Moffett. Twenty years ago the plant was moved from Dayton to Cincinnati, and since that time Mr. Moffett's concern has been a large operator in fancy woods both in the form of lumber and veneers. Associated with Mr. Thompson was E. W. Robbins.

Besides his connection with the Maley, Thompson & Moffett Company Mr. Moffett was also a member of the Rockport Sawmill Company of Rockport, Ky., and was also identified with the Moffett & Robbins Company of Havana, Cuba. The latter concern deals in mahogany and while it does a large export business, it furnishes most of the mahogany logs for the large veneer plant of the Maley, Thompson & Moffett Company, Cincinnati.

The deceased was one of Cincinnati's leading and most esteemed citizens. He was a director of the Fifth-Third National bank and a director of the new Hotel Gibson Company. He was prominently identified with the Receivers' & Shippers' Association and was particularly active in the fight put up by that association on the freight rate question. Several years ago he was president of the Cincinnati Business Men's Club, and gave that organization one of the best administrations it has ever had. He was twice president of the Lumbermen's Club of Cincinnati, a member of the Chamber of Commerce, Manufacturers' Club, director of the University of Cincinnati, and a member of other leading Cincinnati institutions.



CLARENCE BOYLE, CHICAGO.



EDWIN W. MEEKER, CHICAGO.



THE LATE THOMAS J. MOFFETT, CINCINNATI, O.

Mr. Moffett was a man of commanding presence, quiet and unassuming in manner though very forceful and with an apparent immense reserve power. His life exemplified most thoroughly the honest, earnest and brainy business man of the present day. His executive ability was of a high order.

The passing of Mr. Moffett leaves a void in lumber circles that will be hard to fill.

Forest Products Exposition Appoints Manager

With the arrangement of details for the incorporation of the Forest Products Exposition Company and preliminary plans for that important undertaking, the executive committee of the organization committee formed the Forest Products Exposition Company and engaged George S. Wood of Chicago as manager of the exposition.

From a standpoint of experience, and general business reputation, this choice seems to have been a good one. Mr. Wood's business career, covering a number of years of activity, has been almost entirely in the field of promotion, publicity and executive authority in public, civic and semi-public undertakings.

Coming to Chicago from the West, with a thorough newspaper training, Mr. Wood became identified in the early nineties with the principal expositions and trade shows and public celebrations in Chicago and vicinity, and this has practically been his work ever since. The International Live Stock Exposition, the International Horse Show, the Annual Flower Show, Dog Show, Carriage Show, Power Boat Show, Poultry Show, First Real Automobile Show ever given in Chicago, and many other similar happenings have engaged the efforts of Mr. Wood in some important capacity.



GEORGE S. WOOD, CHICAGO, MANAGER FOREST PRODUCTS EXPOSITION

Mr. Wood at present represents the Drake Hotel Company, owner of the Blackstone hotel, and is assistant to the president of the National Soil Fertilizer League, an important organization of railroad presidents, bank presidents, educationalists, economists, supporting national legislation for better farming.

Mr. Wood is one of the oldest members of the Press Club of Chicago, is a Knight Templar and Shriner, and a member of the Illinois chapter of the Sons of the American Revolution, and is at present serving his second term as president of the Kansas Society of Chicago. Mr. Wood has many other fraternal and social connections not outlined here.

In discussing Mr. Wood's appointment as manager some of the largest lumbermen feel enthusiastic over the success of the committee in securing Mr. Wood, for they realize he is the logical man for the position.

Death of William Maule

William Maule, son of the late widely-known lumber dealer, Henry Maule, and brother of the long-time treasurer of the Lumbermen's Exchange, Charles P. Maule, died in New York on Sept. 2. Mr. Maule and wife after motoring among the Berkshires, arrived in New York late in the afternoon and had stopped at the Waldorf-Astoria before returning the next day to their home, Briar Crest, Villanora, near Philadelphia. He left the hotel to visit a club of which he was a member to all indications in the best of health, but while chatting with some friends there he sank back in his chair and in an hour was dead of apoplexy.

Mr. Maule was an extensive seed dealer, being the head of the William H. Maule Seed House, 1707 Filbert street, as well as of the Practical Farmer, at Eighteenth and Market streets. He was connected with the Art Club, of which he was a charter and life member; the Union League, Racquet Club and the Merion Cricket Club. He leaves a widow and two daughters.

Adds Dimension Plant

The Lamb-Fish Lumber Company, in connection with its gigantic sawmill at Charleston, Miss., has installed a dimension plant for the cutting of material for furniture manufacture and other trade. The chief output will be white and red oak and red and sap gum, and a limited quantity of ash.

The Lamb-Fish Lumber Company has a Kraetzer Preparator, and by the aid of this equipment will be able to deliver shipping dry dimension stock within thirty days from the saw. The company also has a dry kiln and can supply the material kiln-dried if required. With the increasing demand for dimension stock the Lamb-Fish Lumber Company should develop a very handsome business in this material.

Indiana Box Factory Burns

The Indiana Box Company's plant at Elwood, Ind., was partly destroyed by fire on Aug. 22, with a loss estimated at $50,000, fully covered by insurance. The rest of the plant was saved with difficulty. Boxes for the shipment of tin plate constitute a large part of the company's product, but the trade extends to other industries.

Changes in Boston Hardwood House

The Jones Hardwood Company of Boston, was incorporated Aug. 20 under the laws of the state of Massachusetts with an authorized capital of $10,000.00, paid in in cash.

The incorporators are Gardner I. Jones, William L. Erhard and Philip J. Coyle. The president and treasurer will be Gardner I. Jones, and with the exception of the necessary outstanding shares for qualification of officers and directors, he will be the principal stockholder.

The Jones Hardwood Company, a Massachusetts corporation, is the exclusive selling agent for the New England Hardwood Company, with mills at Mountain Mills, Vt., and its output of birch and maple lumber will be in the vicinity of from 10,000,000 to 12,000,000 feet per annum.

In addition to this the company is New England agent for the Mowbray & Robinson Company of Cincinnati, O., with a large yard at Cincinnati and mills at West Irvine and Quicksand, Ky., and also for the Tennessee Oak Flooring Company, of Nashville, Tenn., manufacturer of the Tofco brand of oak flooring. The company will continue to handle at wholesale a general line of gum, ash and cypress lumber.

The capital stock of the Jones Hardwood Company, the Maine corporation, which is owned by the New England Hardwood Company, will be liquidated by that company.

Pretty Good for an Invalid

George Osgood of Osgood & Richardson, the well known southern hardwood handlers, with offices in the Peoples Gas building, Chicago, was pretty much of an invalid for about three months in the late spring and early summer. In order to get the better of the trouble, which had a pretty good hold on him, he decided to take a trip to the summer home of Harvey Wilce of the T. Wilce Company, Chicago, prominent hardwood flooring manufacturer.

Mr. Osgood spent about a month at Mr Wilce's home at Empire, Mich., which is located on a small bay opening directly into Lake Michigan, and his appearance as shown in the accompanying photograph is very convlusive proof that the treatment was very efficient for the trouble.

The string of fish which the erstwhile invalid is holding well illustrates the character of the sport he had in that section of the country.



GEORGE OSGOOD, CHICAGO, IN HIS ELEMENT

New Chair Factory for Sheboygan

The twelfth manufacturing plant in Sheboygan, Wis., to be launched as a chair factory has just been organized by Silas B. Crocker, who has been actively engaged in the chair-making business since 1869. Mr. Crocker, who only recently retired from the Crocker Chair Company, has incorporated the Badger Chair Company with a capital stock of $25,000. J. E. Schmidt and W. J. Rietow are also interested. It is understood that the old tannery property on the west side will be utilized as the plant for the new industry. The product is to be bent chairs, and it is further reported that the output will be sold to the Crocker Chair Company, which has been buying these chairs from other manufacturers to supply its own trade. Mr. Crocker is himself chiefly interested in the project and local persons only will be connected with him. The Crocker family has been long connected with the Sheboygan chair industry which has

resulted in that city being known as chair city throughout the country. In 1869 Silas B. Crocker, his father and brothers became interested in the firm of Crocker & Bliss. Later Silas B. Crocker was connected with the Phoenix Chair Company and for two years was engaged with Mann Brothers at Two Rivers. In 1881 the Crocker Chair Company was founded and Mr. Crocker was connected with this corporation until recently when the Crocker interests were sold to Eugene Zundel and others connected with the concern. This new chair factory makes the twelfth factory in Sheboygan which manufactures chairs exclusively or in connection with other furniture.

New Oak Flooring Plant

For more than a year the Yellow Poplar Lumber Company at Coal Grove, O., has been engaged in the construction of a modern oak flooring plant with supplemental dry kilns for the production of the highest possible quality of oak flooring. The material used is the unsurpassed white oak, sawed by this company from its Virginia holdings. The character and quality of this oak has been previously described in HARDWOOD RECORD and, as is well known, physically it is unsurpassed in quality by any oak grown in the known world.

The Yellow Poplar Lumber Company has taken infinite pains to install the most modern type of machinery, and backed by expert skill it certainly is putting out a product of plain and quarter-sawed oak flooring that is unsurpassed.

The company will confine itself entirely to $\frac{7}{16}$ and $\frac{3}{8}$ inch flooring of standard widths. The stock will be hollow-backed, end-matched, bored and carefully graded in accordance with the best known flooring manufacturing practice.

Receiver in Charge of Mantel Factory

The Broadbent Brothers Manufacturing Company of Baltimore, Md., maker of mantels and tables, was placed in the hands of William P. Lyon as receiver, by the circuit court, Aug. 19. No statement of assets and liabilities was made. The receiver gave bond in the sum of $25,000, that being the amount of the capital stock for which the company was incorporated a year and a half ago.

Receivers Will Sell Property

The Thornwood Lumber Company's lands and personal property, located in Pocahontas county, West Virginia, will be offered for sale Sept. 17 by the receivers who have been in possession of the property for some time. The various tracts of timber aggregate more than 10,000 acres, much of it heavily wooded. The property went into the receivers' hands in June. The sale will take place at Marlinton, W. Va.

Timber Purchase

The purchase of over 70,000,000 feet of hardwood timber has been made by Senator Isaac Stephenson for the N. Ludington Company at Marinette. The timber is located in Florence county, Wisconsin, and Iron county, Michigan, having been the property of the Cadillac Timber Company of Cadillac, Mich. The timber will be brought to Marinette by rail and sawed. The consummation of the deal means that the mills of the N. Ludington Company at Marinette will run at least five years longer after next year. The extensive holdings of the N. Ludington Company are reaching the end and would not have supplied the mill for more than a year or two longer. The larger part of the timber is located in Florence county. The deal means much to the city of Marinette as the company employs several hundred men and is a big factor in the industrial payroll of that city. The cash consideration is said to have been $276,000.

Pertinent Information

The Forest Products Exposition

A preliminary outline of the field to be covered by the Forest Products Exposition has been sent in the form of a circular letter to trade papers by George S. Wood, who was recently chosen manager. Suggestions are invited, touching upon both the exposition in general and the details. It is the purpose to adopt a design to be used for advertising purposes, a sort of trade work, or coat of arms, and an invitation has been sent out, calling upon persons with original ideas to submit them. Mr. Wood expresses the hope that the invitation will come to the attention of "ingenious young men and women who can combine what would suggest itself in the way of a comprehensive and not too involved design covering the range of purposes of this exposition. He would like to have impressed in this design an idea of an architecturally well balanced view of the exposition, showing the lumber exhibits, possibly bungalows and other lumber formation, woodworking machinery, wood products of various kinds, and a forestry exhibit, all embraced in a general scheme. While not speaking authoritatively, the accepted design or designs will be paid for, a committee of disinterested and competent people making the selections and probably awarding prizes. Probably a more definite announcement along these lines will be made later, yet the idea can be followed out and some work be done."

The exposition will open at the Coliseum, Chicago, Apr. 30 and will close May 9. It will then be removed to Grand Central Palace, New York, opening May 21, and closing May 30.

Forestry Exhibit for Indiana

E. A. Gladden, secretary of the Indiana State Board of Forestry, Indianapolis, Ind., has sent out the announcement that there is to be a forestry exhibit at the Indiana State Fair, Indianapolis, Sept. 8 to 12. This display is intended to serve the following purposes:

To impart some instruction to those wishing to learn.

To create a sentiment in favor of wood preservation, by the use of treated timbers, and by substituting less expensive but more prevalent for more expensive and less prevalent species.

To call the attention of young and old to the beauty and charm of the trees themselves, whether used as ornaments to the home grounds, as shade trees along streets or avenues, as necessary adjuncts to beautiful parks, or as producers of lumber.

To stimulate a desire among the people of this commonwealth to plant, care for and protect trees.

To cause their value as a product of nature to become more apparent to the layman.

To bring the board of forestry before the people—to prove to them that there is a board, and to explain the reason for its existence.

The board has secured the services of P. H. Teal, a graduate in forestry at Purdue University, who will have charge of the exhibit and will serve in the capacity of assistant for that purpose.

This is the first time in lumber history that anything of this sort has been attempted, and it should be of great interest to everyone in the least interested in the world's second largest industry—lumber.

Wisconsin Trains Forestry Men

Wisconsin is training men to look after its interests in forestry. Nine have just completed the first year of the course in the state university at Madison, and have gone into the woods to put into practice what they have learned in theory. The purpose of the course offered by the university is to prepare men for positions as rangers, forest guards, tree planting experts, nursery foremen, and as competent and responsible assistants to commercial nursery men, lumbermen and to workers in kindred vocations.

Those selected for service in the forest reserve this fall are: William E. Curtin and Carl Burnham of Madison, Miles L. Bourcin of Wausau, Paul Lawrence and Paul Smith of Rhinelander, Percy E. Weaver and Earl Grow of Woodruff, John Iverson of Sturgeon Bay, and A. F. Fowler of East Troy.

A Substitute that Failed

Substitutes which take the place of wood occasionally fail when the supreme test comes. That happened during the recent long spell of torrid heat in Kansas City. Asphalt pavement buckled and heaved, necessitating an expenditure for repairs estimated at $500,000; but wooden pavement passed through the ordeal without a wrinkle. This recalls an experience in the Baltimore fire where the wooden block pavement on one of the worst burned streets was so little damaged that the blocks were used again, while some of the asphalt and other pavements practically disappeared.

Economic Education in Pennsylvania

The Pennsylvania commissioner of forestry is engaged in a practical, sensible work having for its purpose the enlightenment of the people of that state on the value of the forests. The fire season is now approaching in that region and he is sending out short, pointed circulars giving timely advice, and practical information. He claims that forest fires cause a yearly loss of $25,000,000 in Pennsylvania, directly and indirectly, not counting damage to soil, deterioration of water supply, destruction by floods, suffering from drought, and menace to health. The state appropriates $25,900 a year to maintain its forest department.

Resourceful Forest Rangers

One of the qualifications which the government insists on when it picks men to send into remote regions as forest rangers, is that "they must be able to take care of themselves." That has a rather wide meaning. The man who qualifies is ready when the emergency comes, whether he is fighting fire, or building bridges, or sheltering himself and horse in mountain storms, or finding sustenance in a desert region, or standing off gunfighters who sometimes cross the ranger's path. An instance of resourcefulness was lately noted in the Sitgreaves forest, in Arizona, where rangers built a watch tower 115 feet high, of logs, with no appliances other than axes and ropes. The tower was needed as a fire lookout, and the men went to work and built it. Men who are qualified to "take care" of themselves are also competent to take pretty good care of property placed in their keeping.

A Large Undertaking

The announcement is going the rounds of the press, but without citing any particular authority for the statement, that a systematic movement is under way to exterminate timber bark beetles from the United States. If the movement is really under way all people will join in wishing it full speed ahead and a clear track. But is such an undertaking seriously under consideration? If so, which bark beetles of the some hundreds of kinds are to be attacked first, and what will be the mode of attack? There is probably not one acre of woodland in the United States that is not inhabited by bark beetles of one kind or another; and some heavily-infested districts have as many beetles to the acre as the state of Illinois has people.

Most of the species of beetles are comparatively harmless, and no one will pay any attention to them; but some are pests of the worst kind, and against them a declaration of war is always in order. The pine bark beetle and the hickory beetle are among the worst. The former

develops into veritable plagues in certain regions at irregularly recurring periods; the hickory beetle is more constant in its activities, and more regularly dispersed over the country.

The destruction of hemlock among the Alleghany mountains thirty years ago, and the ravages of the beetles among the Black Hills pines later are well known instances of the plague temporarily beyond control. So widespread and so irresistible are the attacks that the efforts of man amount to little. The invasion expends its force and passes away. In small areas men's efforts can successfully withstand the invasions, but no way has yet been devised for doing it when extensive regions are involved.

The harm is usually done while the insect is in the larval state. In the strict entomological sense, it is proper to call it a beetle; but in every day language it is more of a grub. A beetle is defined as having "two thick wings, two thin wings, and six legs," but the bark borers have neither wings nor legs. After they emerge from their burrows they get their wings and legs and take their flight. Their boring is then a thing of the past. The appendages of the body of a fully-developed beetle would disqualify it for making burrows or creeping in them.

Production of Dyestuffs and Extracts

The Bureau of the Census has issued a summary of the output of dyestuffs and extracts in this country in 1909.

The report states that manufacture of dyestuffs and extracts used in the dyeing industry and that of extracts used in the tanning industry are so closely associated that since the census of 1879 the statistics for the two have been combined. The class of dyestuffs comprise natural dyestuffs, artificial dyestuffs, mordants, and assistants. The class of tanning materials includes the ground, or comminuted products of oak, chestnut, and hemlock wood or bark, palmetto roots, and sumac leaves; the fluid or solid extracts from these materials or from quercitron bark, or other tannin-containing materials, tannic or gallic acid, and chrome tannage or other tannage solutions.

The statistics pertain only to establishments producing dyestuffs or tanning materials for sale, and do not represent the entire manufacture of these products, as there is also a large production by establishments that use them in their own processes. This is especially true of the various textile industries, and is often true also in regard to the tanning industry.

The number of establishments reported as engaged in the manufacture of dyestuffs and extracts in 1909 was 107, with a capital of $17,934,545. The number of persons engaged in the industry was 3,015, of whom 2,397 were wage earners. The total value of all products was $15,954,574. The sum of $2,233,705 was paid for services, of which $1,291,379 was for wages. The cost of the materials used was $9,683,651. No establishments employed over 250 wage earners.

At the census of 1849 there were reported 41 establishments with 114 wage earners and products valued at $229,841, and at the census of 1859 40 establishments with 76 wage earners and products valued at $171,253. With the exception of the decade 1889-1899, in which decreases took place, the industry has shown a substantial growth at each successive census. The value of products reported for 1909 was five and a half times the value reported for 1869, which was $2,878,609; part of this increase, however, is attributable to the general advance in prices.

New York, with products valued at $4,505,310; New Jersey, with $3,130,214; Pennsylvania, with $2,345,251; Tennessee, with $1,313,020; Virginia, with $1,199,706; Rhode Island, with $927,676, and Massachusetts, with $725,386, were the principal producing states. The value of the products reported from all the other states was $1,808,011. New Jersey showed the largest relative increase in value of product during the decade 1899-1909, 522.6 per cent.

The report shows that the most important product in 1909 was oak and chestnut extracts, of which 287,908,285 pounds, valued at $6,061,162, was produced; logwood extract followed with a production of 32,317,248 pounds, valued at $991,974. The production of hemlock extract was 12,588,078 pounds, valued at $280,487; of artificial dyestuffs 12,267,399 pounds were produced, valued at $3,462,436. Including subsidiary products reported, the total production of artificial dyes in 1909 was approximately 12,759,000 pounds; of mordants, 1,788,000 pounds; of sizes, 57,400,000 pounds; of tannic acid, 8,000,000 pounds; and of turkey-red oil, 3,398,000 pounds. The consumption of materials included 8,303 tons of sulphuric acid, costing $72,638; 85 tons of nitric acid, costing $7,066; 242 tons of mixed acid, costing $17,291; 6,341 gallons of grain alcohol, costing $3,309; and 724 gallons of wood alcohol, costing $391. In addition 936,578,482 pounds of ground and chipped wood, 293,062,168 pounds of ground bark and 1,955,040 pounds of ground leaves were made and used in the process of manufacture by establishments reporting.

American Sawmill in Japan

Consul George N. West of Kobe, Japan, reports that there is being erected by an American trading company for the Gomei Kaisha Fujita Gumi at Osaka a modern sawmill that is to be fitted throughout with the latest American machinery for sawing logs into various dimensions of lumber, also with the automatic devices for handling it from one set of saws and planers to the other as required. By the use of this modern machinery the daily output will be greatly increased and the labor cost lowered. Through introductions made by this consulate the representative of an American machinery works was able to place some of his saws in the outfit for this mill in addition to placing with another firm some of the same character of saws. This fact is mentioned, as it was by the merest chance that acquaintance was made with this representative of the American firm in the hotel, while he was awaiting the sailing of a steamer, and is used as an argument why American representatives traveling abroad should call on the consular officers at all ports they visit. As the sawmill referred to will be the first to be erected in Japan on the modern American plan it is believed that it will be the forerunner of many more, or the modernization in part at least of those now in operation where the work is done by hand or where only a ripsaw is used.

Effect of Low Prices Abroad

The retarding effect of low prices abroad on the exports of lumber and logs, which had become very pronounced in June, was still more in evidence in July, during which month the shipments in some divisions of the trade dropped as much as fifty per cent, as compared with the corresponding month of 1912. The reduction was especially notable with respect to oak and poplar, and that the total value of the exports does not show a larger decline than is actually the case must be attributed entirely to the occasional shipments of spruce and other extraordinary features. The exports of oak logs, for example, fell from 67,000 feet, valued at $2,494, in July, 1912, to nothing last July, while hickory log exports declined from 70,000 feet, worth $2,120, to 22,000 feet, worth $600. Of all other logs there were exported in last July 18,000 feet, valued at $915, against 111,000 feet, valued at $6,779, in July, 1912. Of oak lumber the shipments last July amounted to not more than 1,844,000 feet, valued at $66,440, as against 3,479,000 feet, valued at $117,100, in July, 1912. The poplar shipments for the same periods were respectively 180,000 feet, worth $8,331, and 303,000 feet, worth $11,253. The exports of "all other" lumber, however, rose from 478,000 feet, worth $20,281, in July, 1912, to 733,000 feet, worth $37,608, last July. The total value of exports was about $50,000 less last July than for the corresponding period of 1912, which tends to show the strength of the business apart from the various items that have gone forward in excessive quantities, and in which congestion has ensued. And the need for curtailment is not yet at an end. Stocks abroad are still reported large, especially in oak planks and some grades of poplar, and the advice of foreign brokers is still that exporters should hold down, shipping only on orders. Of course, as pointed out repeatedly before, the bad effects of shipping on consignment are not confined to such shipments, but extend to the entire trade. As soon as a particular line becomes plentiful the buyers discover that shipments are not up to specifications. Identically the same kind of lumber may have been accepted without question before, but suddenly it is rejected as below grade. To be sure, the buyer is always ready to take the shipment, including the rejected planks, at a proper discount, which generally amounts to the decline in the current quotations below the stipulated contract price. Consequently, the congestion may be said to have a general effect, and it is to the interest of all shippers to hold down until the shipments have been absorbed.

Agree on Shipping of Rough Material Products

A definite understanding concerning the shipping of rough material products was reached on Sept. 2 by the Arkansas Stave and Heading Association and representatives of the traffic department of railroads doing business in Arkansas. The members of the association met with the railroad representatives for lunch at the Hotel Marion, and afterwards held the conference which resulted in an agreement that the railroads shall receive forty per cent on rough material carried to the plants in outgoing shipments of sawed staves or heading and twenty-one per cent on rough material on outgoing shipments of finished bolts or heading.

This meeting was occasioned by a recent movement to have a change wrought in the freight schedule on rough material. The Railroad Commission of Arkansas has held several special meetings of late for the purpose of considering the proposed changes, but no definite action has yet been taken.

As the result of the agreement reached by the two interests on Sept. 2, a resolution was passed by the Arkansas Stave and Heading Association requesting the Railroad Commission to defer the proposed hearing on hardwood and rough material products rates, which has been set for Sept. 15, to the latter part of October. It is the plan of the association, if its request is granted, to present to the commission the data and agreement, so as to put in effect the rates agreed upon.

More than fifty men were in attendance at the meeting, many being representatives from other states who are interested in the outcome of the dispute over the rates on rough material in Arkansas.

The Stave & Heading Association elected J. A. Morgan of St. Louis as its traffic manager. Mr. Morgan is already serving as traffic manager for the National Cooperage Association, the National Tight Barrel Stave Association, the National Slack Barrel Stave Association and the National Traffic Bureau. A committee, composed of J. A. Morgan, W. C. Hasty of Paragould and J. H. Hamlin of the Hamlin Stave Company of Little Rock was appointed to draft the formal agreement as reached by the association and the railroads. This agreement is to be printed and distributed for use among the manufacturers of hardwood products and the railroads of Arkansas.

Midsummer Forest Fires in Michigan

Charles F. Hickok, chief warden of the Michigan Hardwood Manufacturers' Association, forest fire protective department, has published a report for July and August, of which the following is a summary:

In reporting on the activities of this department for the months of July and August it gives me great pleasure to report no loss to listed properties by forest fires. The month of July was a favorable one for the work of forest protection. Local showers were of frequent occurrence throughout the patrol districts and these, followed by a rising temperature, brought on a heavy undergrowth over forest and slash lands. This green growth on the cut-over lands served to retain the moisture supplied by the showers.

Many fires were sighted during the month but, on investigation by wardens, were found to be fires set by settlers who were taking advantage of the favorable conditions to burn stumps and old log heaps. All of these fires were kept under control by the parties responsible for their origin. The men were prompt in locating and visiting the scene of all fires and, in each case, those having fire in charge were warned against their being allowed to run at will. Taken as a whole, the month of July has been the most favorable month of the patrol season, only four neglected fires being discovered by the department, and they were discovered while small and quickly extinguished.

The beginning of August ushered in a decided change in weather conditions. Showers were not as frequent as those in July and were of a shorter duration. During a part of the month much heavy south and southwest wind was experienced with rising temperatures. However, this condition was relieved by light rainfall followed by cool nights and subsiding wind and no fires were recorded for the week ending Saturday, August 9. The days following were noticeable for sudden changes from heat to cold. Forty-nine roaming fires were recorded for the month.

The late frosts of May and June killed nearly all the buds and blossoms on the blueberry bushes, destroying the crop almost entirely. During a short time many searchers for this desirable fruit were met in the woods and on the plains by wardens on patrol. The blackberry crop, coming later in the season, was untouched by frost, and berries have been fairly plentiful in many localities. Berry pickers, in large numbers during the past thirty days, have been located and warned against the careless use of fire. Stream and lake fishermen, campers and woodsmen have been much in evidence during the past sixty days.

This office is in receipt of numerous reports of camping locations visited where camp fires had been drenched or buried with sand. These and other indications point to an awakening, on the part of the public, to the careful use of fire. Worthy of mention is the precaution taken by owners of traction engines, many of whom are now moving from place to place. Wardens have met these machines on the roads and found them to be well screened. Some distance in the rear of the engine a man was met who followed in the capacity of patrolman to discover and quench any fire that might possibly be set by the engine. This precaution points to a great improvement over conditions of the past.

In compliance with a general order from this office, the men are cruising their districts in view of locating the most desirable points for the erection of lookout towers. It is the purpose of the department to erect twenty-four of these in the fire zone covered by the wardens. They are to be fifty feet in height and are to be placed in carefully selected locations, overlooking large areas. From these smoke can be sighted and fire easily located. In many of the districts two towers can be placed to such an advantage that a view of the whole district can be gained by visiting each tower. This lookout service will prove of great value during dry periods when fires are numerous and discovery of small fires is essential.

The two months' record of causes and number of fires follows:

Cause	Number
Lightning	1
Railroads	13
Settlers	12
Fishermen	1
Campers	1
Berry pickers	5
Smokers	8
Logloaders	1
Boys herding cattle	1
Unknown	6
Total	49

Cut-over land to the amount of 1,712 acres was burned over during July and August. In some cases fires were allowed to run in order that bad fire traps might be burned out, thus reducing the hazard during dangerous periods.

This office is in receipt of reports from nine districts relative to the co-operative burning of slash in the townships embraced in the patrol area. The idea is meeting with hearty support by supervisors and residents alike, and it is believed one trial of the plan will suffice to establish co-operative burning days as a custom throughout the fire zone with a consequent reducing of the hazard and loss from forest fires.

Chicago Exposition in Argentina

Consul R. M. Bartleman at Buenos Aires, South America, reports, to this government that an exposition of American manufactured articles which are exported by members of the Chicago Association of Commerce was opened at Calle Belgrano 732, Buenos Aires, on July 7, 1913. This exhibit consists of a varied assortment of manufactured products, such as elevators, braces, paint, trunks, desks, addressing machines, lamps, soap, clothing, canned food, and many others, and is purely an exhibit, nothing whatever being sold. This exposition has awakened a great deal of interest and will be a permanent feature of the work which the Chicago association is doing in this city. It is a commendable method of bringing American-made goods to the attention of merchants in this city and should be fruitful of profitable results.

An Opening in Morocco

A report to this government by Consul Maxwell Blake at Tangier, Morocco, calls attention of American business men to that country as a promising field for trade expansion. Various commodities manufactured wholly or partly of wood are listed among those likely to find market in that country. Agricultural implements and furniture are listed, and lumber to the value of nearly $200,000 a year is already entering from America. The markets of Morocco have heretofore been of small value to foreign manufacturers because of the insecure conditions in all parts of the region back from the immediate coast; but the military campaigns carried on by the French have brought the warring tribesmen to terms, and great trade development is looked for in that region. Americans are free to compete for as much of the trade as they want. It is practically a treeless region and the United States is in a position to secure a generous share of the lumber trade.

Building Operations for August

The official reports of building permits issued during the month of August by 66 cities throughout the country, received by the American Contractor, Chicago, reach a total value of $51,328,287, compared with $75,818,314 for August, 1912, a decrease of 32 per cent. This sharp shrinkage is not due entirely to a decrease in new work this year, but rather to a spirit of activity a year ago. For while the building permits decreased this year from $56,228,194 in July to $51,328,287 in August, a decrease of less than 10 per cent, the total during the summer of 1912 increased from $66,245,719 in July to $75,818,314, a gain of about 15 per cent. It is interesting to note also that the shrinkage in building activity for August is not general. More than one-third of the cities reporting, or 24, show gains. The principal gains made in August, as compared with a year ago, were as follows: Cleveland, 92 per cent; Newark, 101 per cent; Oakland, 80 per cent; South Bend, 71 per cent; Syracuse, 50 per cent; Tacoma, 71 per cent; Troy, 152 per cent. Details are as follows:

City—	August, 1913.	August, 1912.	—Per Cent Gain.	Loss
Akron	$ 354,125	$ 554,865	..	36
Atlanta	348,259	478,159	..	27
Baltimore	674,887	694,504	..	3
Birmingham	333,385	325,761	2	
Boston	817,975	1,956,641	..	58
Bridgeport	409,060	.....	..	..
Buffalo	682,005	900,000	..	23
Cedar Rapids	250,000	180,000	39	..
Chattanooga	125,430	134,210	..	6
Chicago	5,744,900	8,436,100	..	32
Cincinnati	504,130	1,618,385	..	69
Cleveland	4,041,979	2,102,063	92	
Columbus	495,140	389 830	27	..
Dallas	405,300	623,098	..	35
Dayton	144,460	260,285	..	32
Denver	293,810	543,830	..	37
Des Moines	88,775	79,475	12	..
Duluth	158,960	207,788	..	23
Evansville	171,375	188,620	..	9
Ft. Wayne	174,175	264,805	..	34
Grand Rapids	220,701	200,514	10	
Harrisburg	95,565	77.725	23	..
Hartford	554,425	514,930	6	
Indianapolis	700,768	888,670	..	21
Kansas City	827,475	1,016,150	..	18
Lincoln	75,115	125,500	..	40
Los Angeles	3,501,593	3,212,007	9	..
Louisville	445,210	551,800	..	19
Manchester	80,569	741,712	..	89
Memphis	321,116	1,101,595	..	71
Milwaukee	1,159,013	1,026,300	13	
Minneapolis	1,211,230	1,050,815	15	..
Nashville	101,224	146,660	..	31
Newark	1,814,638	901,069	101	
New Haven	258,693	291,705	..	11
New Orleans	295,260	384,636	4	..
Manhattan	4,458 931	22,253,051		80
Brooklyn	2,663,107	2,805,533		5
Bronx	1,201,643	2,300,552	..	48
New York	8,723,731	27,758,936	..	76
Oakland	1,080,996	600,080	80	..
Omaha	536,515	474,137	13	
Paterson	49 730	136,303	..	63
Philadelphia	3,696,860	3,445,535	7	..
Pittsburgh	1,059,662	1,170,434	..	9
Portland	1,168,245	1,094,509	7	..
Richmond	304,343	413.935	..	26
Rochester	791,643	1,005,329	..	21
St. Joseph	42.970	132 848	..	68
St. Paul	775,146	618,744	25	..
St. Louis	1,082,947	1,671,951	..	35
San Antonio	225,385	334,515	..	33
San Francisco	1,613,881	1,950,502	..	17
Scranton	63,629	185,810	..	66
Seattle	782 425	563,435	3	..
Shreveport	101,438	425 889	..	76
South Bend	113,472	66,290	71	
Spokane	110,920	110,457	..	
Springfield	70,025	143,225	..	51
Syracuse	501,145	333,095	50	..
Tacoma	152,737	89,527	71	
Toledo	557,830	334,985	7	
Topeka	44,825	85,362	..	47
Troy	141,780	56,215	152	..
Washington	627,472	912 766	..	31
Worcester	241,993	587,858	..	59
Total	$ 51,328,287	$ 75,818,314	..	32

Hardwood News Notes

MISCELLANEOUS

Harris & Cole Bros. have discontinued business at Cedar Falls, Iowa.

The Iberia Cypress Company has discontinued business at New Iberia, La.

The Robinwood Lumber Company will erect a hardwood mill plant at Jackson, Miss.

The Illinois Refrigerator Company at Morrison, Ill., has increased its capital to $400,000.

The Meader Furniture Company, Cincinnati, O., has reduced its capital stock to $16,000.

The capital stock of the Ross Cabinet Company, Otsego, Mich., has been increased to $70,000.

The Badger Chair Company has been incorporated at Sheboygan, Wis., with a capitalization of $25,000.

At Pikeville, Ky., the Big Sandy Spoke Company has been organized with a capitalization of $20,000.

The Hudson Lumber Company, Garnett, Mich., has been succeeded by the D. N. McLeod Lumber Company.

The American Timber Company has been incorporated at Cleveland, O., with a capital stock of $100,000.

George Kunz has been appointed receiver for the James & Meyer Buggy Company, Lawrenceburg, Ind.

The Marion Chair Company has been incorporated at Marion, Ind., with an authorized capital of $40,000.

George H. Taylor has been appointed receiver for the Poughkeepsie Chair Company at Poughkeepsie, N. Y.

The Missouri Casket Company of St. Louis, Mo., has consolidated with the St. Louis Coffin Company, that city.

An increase in capital stock has been made by the Buckeye Incubator Company of Springfield, Ohio, it now being $75,000.

The Atlantic Coast Lumber Corporation is rebuilding its big mills at Georgetown, S. C., which were destroyed by fire last spring.

The Miller Manufacturing & Lumber Company was recently incorporated at Linwood, N. C., with a capital stock of $100,000.

Ferguson & Wheeler have recently again engaged in the manufacture of hardwoods at Poplar Bluff, Mo., after a lapse of a few years.

The Ocala Furniture Company has been organized at Kissimmee, Fla., for the manufacture of mission furniture, and is erecting a plant there.

The Kirkham-Mattson Company, manufacturer of tables at Grand Haven, Mich., has incorporated with an authorized capital stock of $20,000.

The South Side Lumber Company has been organized at St. Louis, Mo., by Louis J. Gamble, H. J. Gamble and O. L. Gamble, with a capital stock of $35,000.

The capital stock of the Patterson Manufacturing Company, manufacturer of wagons and bob sleds, at Holly, Mich., has been increased to $75,000.

The plant of the Lindsey Lumber Company, Pollard, Ark., destroyed by fire a short time ago is to be rebuilt, and will have a daily capacity of 75,000 feet.

The Mercantile Trust Company of Little Rock, Ark., has been appointed receiver for the Cremer Lumber Company of St. Louis, Mo., and Crossett, Ark.

An involuntary petition in bankruptcy has been filed by the Reliance Lumber & Manufacturing Company, Columbus, Ohio, and a receiver has been appointed.

Another new St. Louis corporation is the Trio Lumber Company, of which the incorporators are: Robert Kamm, Thomas C. Bledsoe and W. M. Kingsbury. Capital stock $2,000.

The Standard Lumber & Supply Company has recently commenced business at Baltimore, Md., to manufacture lumber and veneers, with offices at Howard and Stockholm streets and mill at Bristol, Tenn.

It is stated that the Marathon Lumber Company, Wausau, Wis., will establish a sawmill of 125,000 feet daily capacity at Laurel, Miss., and has purchased 50,000 acres of timberland in Newton, Jasper, Smith and Scott counties, Miss.

A plant for the manufacture of library, dining tables, chairs, etc., will be erected by the Tampa Furniture Manufacturing Company at Tampa, Fla. The capital stock of the new company is $100,000, and R. L. Goode is president and manager.

A large hardwood sawmill is to be erected at Vinton, Calcasieu Parish, La. The parties interested in this new enterprise are understood to be: T. D. Bonfield and D. M. Scott of Detroit, Mich.; E. Elms of New Orleans; Frank Jarsey and Al. Powers of Chicago.

The Atlantic Coast Veneer Company, of which James A. Rowan is president, at Wilmington, N. C., will build a veneer plant for the manufacture of veneer and fruit baskets and furniture. J. T. Davis is vice-president; W. P. Adams, secretary, and Martin Schnibben, treasurer.

Several of the officers of the United States Lumber Company, together with other parties from Philadelphia and Scranton, Pa., have recently purchased 19,000 acres of land in Bath, Highland and Augusta counties, Va., and Pendleton county, W. Va., including some of Virginia's finest white oak.

CHICAGO

E. T. Bennett, president of the Bennett Hardwood Lumber Company, Memphis, Tenn., that prince of good lumbermen as well as good fellows, spent a day or two in Chicago the latter part of the week on his way home from a month's vacation in the Cape Cod country, where he has been engaged in his usual annual stunt of deep-sea fishing.

Charles S. Gladden of Memphis, Tenn., spent last Saturday in Chicago en route to a little outing in the Grand Traverse country.

W. B. Townsend, president of the Little River Lumber Company, Townsend, Tenn., accompanied by his wife, is spending a few days in Chicago this week.

The Commercial Handle Company, Chicago, has changed its name to the Commercial Handle & Novelty Company, and has increased its capital to $10,000.

Charles Darling & Co., this city, has incorporated under the same name, the capital being $50,000.

H. W. Childers, who has been associated with Nickey Bros. & Bass, Inc., Memphis, Tenn., for some time has taken the position of sales manager of the H. H. Hitt Lumber Company, Decatur, Ala. Mr. Childers entered upon his new employment Sept. 1.

A. C. Lange, formerly associated with the Paepcke-Leicht Lumber Company in its Mississippi and Arkansas operations, is now engaged in the manufacture of boxes at Clarksburg, W. Va. He spent a few days in Chicago last week renewing acquaintances with his old friends.

John C. Spry, the well-known timber factor of Chicago, is sojourning down in the Cape Cod country at the present time, luxuriating in fresh-plucked clams and other things which contribute to longevity, health and happiness.

The eighth annual convention of the Federation of Trade Press Associations is scheduled to be held at the Hotel Astor, New York City, Sept. 18 to 20.

The Chicago Association of Commerce in one of its recent bulletins announces a convention of the Handle Manufacturers' Association to be held at the Hotel Planters, Chicago, Sept. 12 to 15.

Acknowledgment is made, through the courtesy of the Clyde Iron Works, Duluth, Minn., of the receipt at this office of a very handsome leather card case, interspersed with memorandum leaves. Advertising Manager Charles Mackintosh is distributing a limited quantity of these handsome books to the pet customers of the Clyde Iron Works.

D. E. Kline of the Louisville Veneer Mills, Louisville, Ky., accompanied by his wife, spent a few days in Chicago last week.

A. C. Quixley of the Quixley & Bulgrin Lumber Company, this city, has just returned from a month's stay in northern Wisconsin.

W. B. Barns, of the St. Louis Lumberman, was a welcome caller at HARDWOOD RECORD offices on Sept. 3. Mr. Barns is on his way home from a two months' sojourn at his summer cottage near Northport, Mich.

Edward Skeele, Jr., son of E. E. Skeele of the Estabrook-Skeele Lumber Company, Chicago, has started out as third assistant-commodore or something of that sort, on the Columbus fleet, Santa Maria, Pinta and Nina, en route down the Great Lakes, St. Lawrence river, Boston, New York, Philadelphia, Baltimore, through the Chesapeake canal and thence down the Atlantic coast to the Panama canal, and thence down the west coast of South America and back in time for the opening of the San Francisco Exposition. The promoters of this enterprise expect to have the distinction of putting the Columbus fleet first through the completed canal early in January, 1914. Ed Skeele will certainly be envied by thousands of boys in the country for having captured a berth aboard this expedition.

Acknowledgment is made to Frank F. Fish, secretary and treasurer of the National Hardwood Lumber Association, McCormick building, Chicago, for a copy of the association rules for the inspection and measurement of hardwood lumber, dated September, 1913. This set of rules is entirely up-to-date, as it incorporates the most recent changes. Copies will be promptly supplied to the trade upon application to the secretary.

G. N. Lamp of the Forest Service spent a few days in Chicago last week on his way from Washington, D. C., to California, where he will investigate the botany of the chaparral growth which covers much of the steep lands. The chaparral is a dense mass of brush of different species, which never develops into trees.

T. M. Brown of W. P. Brown & Sons Lumber Company, Louisville, Ky., was in town for a few days last week.

E. B. Brown, the wagon woodstock manufacturer of Buffalo, N. Y., was a welcome caller at RECORD office Sept. 4.

Earl Palmer of the Ferguson & Palmer Company, Paducah, Ky., was in the city Sept. 4.

R. H. Butters, secretary, treasurer and general manager of the Marshall Butters Lumber Company, L'Anse, Mich., was among the Chicago visitors last week.

George McSweyn, vice-president of the Memphis Band Mill Company, Memphis, Tenn., was in town Aug. 30, en route to Grand Rapids, Mich.

W. B. Heinemann, vice-president of the Heinemann Lumber Company, Wausau, Wis., called on the local trade last week.

Walter E. Kelly of the W. E. Kelly Company, Detroit, Mich., stopped off in Chicago Aug. 28, on his way home from a western trip to Colorado and Yellowstone National Park.

J. T. Edwards, president and manager of the Medford Veneer Company, Medford, Wis., spent a few days in Chicago recently.

William A. Eager, the local wholesale hardwood man, is home from an outing in the Fox river country where he owns a bungalow. Incl

dentally, he is telling some wonderful fish stories at the Lumbermen's Club.

P. E. Gilbert, sales manager of the Wisconsin Lumber Company, Chicago, is home from a three weeks' vacation at Spring Lake, Mich.

W. E. Johns of the Johns-Mowbray-Nelson Company, Cincinnati, O., was in town last week on his way home from a sales trip in Wisconsin and Michigan. He reports a very fair volume of business.

NEW YORK

The lumber trade of this city is watching with interest the progress of the proposed new building code, certain provisions of which are inimical to the interests of the lumber trade. A hearing was held before the building committee of the board of aldermen, at which the lumber trade was heard in protest. The fight will be carried before the whole board unless the restrictions are modified by the committee.

Current reports concerning building operations in New York show a decrease of $31,000,000 in estimated cost of projected buildings. The decrease is almost wholly confined to business buildings. It is freely said that New York is overbuilt in certain classes of buildings and a cessation until present day vacancies are removed would be good for the owners and business generally.

H. B. Worden, representing redwood manufacturers of California, was in New York last week in the interest of business.

R. A. Brown, local manager of the Strable Manufacturing Company, is back in harness after a summer vacation spent in the mountains.

E. L. Hunter of the Tilghman Cypress Company, Lukens, Fla., spent several days in town last week going over business with his associates in the Hoban-Hunter-Feitner Company, cypress specialist of Brooklyn.

BUFFALO

The Perry Centennial, lasting a whole week, interrupted the lumber business to a large extent, but it proved a very interesting affair and was made up of many different features, with parades, sports and fireworks included. The parade of automobiles to the number of several thousand was one of the largest ever held here. It was under the auspices of the Automobile Club of Buffalo, of which M. M. Wall is president. I. N. Stewart was chairman of the entertainment committee in charge of the parade, and among other members were O. E. Yeager, C. W. Betts and J. B. Wall.

The banquet to visiting officials and others by the New York State Perry Centennial Commission was attended by several hundred persons and was served at the Iroquois Hotel. J. N. Scatcherd was toastmaster.

The well-preserved old wooden flagship Niagara, with its solid oak and fir timbers, was the center of attraction and lay at a convenient spot for visitors' inspection all the week.

The old engine DeWitt Clinton, the first locomotive operated in New York state, which burned pitch pine, instead of coal, was also an interesting sight, as were the primitive coaches, which were in such marked contrast to the modern wooden passenger cars of today.

O. E. Yeager has returned from an automobile trip to New York, Philadelphia and Atlantic City.

J. Newton Scatcherd exhibited during the Perry Centennial week a cane made in 1846 from a plank taken from the hull of the Lawrence, formerly Perry's flagship.

Charles Perrin of Blakeslee, Perrin & Darling has returned from a two weeks' vacation, which he spent at the old farm on the borders of Conesus lake, in Livingston county.

J. D. McCallum of the Hugh McLean Lumber Company has gone to his former home in Canada on a vacation trip. He made the trip by way of the St. Lawrence and Thousand Islands.

James A. White of the W. H. White Company has been spending some time in Michigan, looking after the interests of his company. The two boats of the company will bring in cargoes here this fall.

James M. Briggs & Co. have disposed of a large stock of hardwoods and hemlock sawed out at their mill at Protection, N. Y. Alfred Swanson has been there recently looking after shipments.

F. M. Sullivan and F. T. Sullivan entertained their brother, W. H. Sullivan, here last month and the three took an automobile trip with their families through Canada.

W. K. Jackson has returned from a business trip to Jackson Brough, Ont., where Jackson & Tindle have a large colonization enterprise and have set up a sawmill. The tract is filling up rapidly.

The Standard Hardwood Lumber Company will bring in supplies of lumber from the Cumberland river district this fall. The trade in hardwoods, especially in oak and ash, is reported to be improving at the yard.

PHILADELPHIA

E. M. Bechtel, sales manager of William Whitmer & Sons, Inc., reports a decided advance in trading during the last fortnight. He thinks the outlook very encouraging.

Thomas B. Hoffman of the J. S. Kent Company, says a considerable advance in trading may be looked for with the opening of the fall season, but greatly improved business conditions cannot be reckoned upon until the final settlement of the tariff and other disturbing commercial questions. Prices in some lines show a decided drop but buyers are still holding off in hopes of a further decline.

E. P. Haubert, assistant treasurer of the Whiting Lumber Company, admits a slight improvement in trading during the last fortnight. Inquiries are more liberal, resulting in some desirable sales.

Maurice J. Dukes of the R. A. and J. J. Williams Company says things have been more lively during the last fortnight and indications point to a more copious trading in the fall.

S. P. Bowers of the S. P. Bowers Company speaks complacently of conditions. Railroads are buying freely and prospects for fall and winter business are promising.

The Johnstown Cooperage Company, Johnstown, Pa., with a capital stock of $5,000, and the Standard Automobile and Machinery Company, Johnstown, Pa., with a capital stock of $50,000, obtained charters under Pennsylvania state laws, Aug. 23.

Samuel H. Shearer of Samuel H. Shearer & Son, has just returned from a two weeks' vacation trip to Chebeague, Me. He says he had a fine time and is now in good shape to tackle business.

George P. DeWitt of the Maris & DeWitt Lumber Cohpany is back from a three weeks' stock hunting trip through western Maryland and West Virginia. He reports no overaccumulation of stocks, and prices high. Arthur McIlvain Maris, son of J. M. Maris of the above concern, who was returning from a summer camping party, was a passenger on the train which was wrecked about six miles above New Haven, Conn., on Sept. 2. He escaped with his life, but was so bruised and shaken as to necessitate going to a hospital. J. M. Maris is in Colorado.

J. Randall Williams, Jr. of J. Randall Williams & Co. says business improves slowly. It is too early to pronounce upon the fall and winter trading, but cooler weather will start something doing, he thinks.

Frank H. Hawkins of the Kirby & Hawkins Company, who has just returned from a vacation trip in the Pennsylvania mountain district, reports business fairly well sustained for this time of year. W. S. Kirby is rusticating on a farm up state. He says for two weeks he will try leading the simple life.

Howard B. France of the Monarch Lumber Company and the Haddock-France Lumber Company says there is a slight tendency towards improved conditions. Prices are erratic and in some lines way off, but stock conditions will no doubt prevent further drop. The mill at Sterling, N. C., is curtailing its output.

The Philadelphia Lumbermen's Golf Club has decided on Sept. 16 for next game, which will be played at the Huntingdon Valley Golf Club grounds. As this is the annual meeting, the election of officers for the ensuing year will take place. A big crowd is expected to be present.

PITTSBURGH

H. E. Ast of the Mutual Lumber Company is getting some fine business in oak, chiefly car stuff. He spent a week recently in the Buffalo district.

The plant of the Tellico River Lumber Company at Tellico Plains, Tenn., which is owned by the Babcock interests of this city, was burned Aug. 31. The fire destroyed the big double-band saw mill and also one of the two planing mills of the company. This was probably the largest lumber plant in Tennessee and will be replaced at once by another plant with a considerably larger output. The company owns about 100,000 acres of timber and C. L. Babcock, vice-president and general manager, announces that the new operation will be going in full by Jan. 1.

The Pennsylvania Department of Forestry is showing for the first time at the Pittsburgh Exposition a splendid resume of its work. There are dozens of big photographs showing typical lumber operations, wasteful and otherwise, and also the fire warden system watch tower, denuded timber tracts, damage done by floods, growth of white pine trees year by year, different types of oak peculiar to Pennsylvania and also the different cuts of logs across the grain for veneering purposes. The commission has an array of statistics to show that Pennsylvania in ten years more at its present rate of timber cutting will not be able to supply its own wood consuming factories.

The Foster Lumber Company has a dozen or more good country mills cutting hardwood in eastern Ohio and western Pennsylvania. It reports a splendid trade in oak with the railroads and is getting good prices throughout the list.

George J. Hull of Waterford, Pa., has bought one of the finest tracts of virgin hardwood timber in western Pennsylvania, being located only five miles from Waterford. A mill will be put in at once to cut off the oak and chestnut on the land.

The Joseph W. Cottrell Lumber Company has been incorporated by Joseph W. Cottrell, veteran wholesale lumberman of this city, J. Herbert Rush, Uniontown, Pa., and R. L. Smith of Pittsburgh, Pa., with a capital of $15,000. The company will have headquarters in the Ferguson building in this city.

The Henderson Lumber Company reports a splendid business in mixed hardwoods. Its trade with the mining concerns has been better the past summer than for years. About the only complaint it has to make about the situation is the slow deliveries during July and August.

The Hamilton Lumber Company, one of the leading hardwood concerns in the city, has been piling up some big orders the past three weeks. Mr. Hamilton says business is coming with less expense and less effort than for a long time.

BOSTON

L. W. Taylor, for the last seven years superintendent of the Triumph Column Company, East Norwalk, Conn., has resigned. He was formerly connected with the Colonial Mill and Lumber Company of that place. Mr. Taylor has not announced his plans for the future.

The South End Lumber Company has been incorporated in Boston with a capital stock of $25,000. The incorporators are George E. Feast, Nathan R. Flynn and Frank A. Bertsch.

James Manson of the Manson Lumber Company, well-known Boston lumber dealer, who was seriously injured late in July, is reported as recovering slowly. His hand was so badly smashed that it had to be amputated.

Charles G. Ellis, a prominent lumber dealer in Sagamore, Mass., died suddenly of heart failure, Sept. 1, following a severe attack of acute indigestion. Before establishing his business in Sagamore Mr. Ellis had conducted it in Sandwich for several years. He was 51 years of age. He is survived by a widow and two sons.

The William H. Wood Lumber Company, Cambridge, Mass., is erecting a large lumber storage shed. The new shed will be two stories, 72x18 feet.

The Smith & Bent Lumber Company of New Haven, Conn., has filed a certificate changing its name to the Smith Lumber Company.

Alex Ceppi & Co., Boston, manufacturers of mouldings, have incorporated with a capital stock of $25,000. The incorporators are Oscar A. Ceppi, George U. Bauer and Mary C. Dolan.

The Simonds Mfg. Company of Fitchburg, Mass., has purchased the plant of N. C. Boutelle, Leominster, Mass., where it will manufacture handles for its saws. The factory that the Simonds Mfg. Co. has purchased was formerly used for the manufacture of furniture.

The Wason Manufacturing Company of Springfield, Mass., has started building a frame lumber shed, 36x225 feet at its plant in that city.

BALTIMORE

The Inspection Bureau of the Baltimore Lumber Exchange has been moved from the northeast corner of Pratt and Concord streets to the northwest corner of these two thoroughfares, commodious quarters having been obtained in the Coca Cola building. The new location overlooks the Pratt street wharves and is most convenient for the force of inspectors.

The building occupied by the Baltimore Hub, Wheel and Manufacturing Company, Baltimore & Ohio railroad and Hartford road, which was almost completely destroyed by fire on May 10 last, has been entirely reconstructed and will be ready for occupancy in about two weeks. The same concern will operate its plant there.

Stephen S. Mann, of Mann & Parker, Inc., hardwood wholesalers, with office in the Continental building, is on a trip down south taking up stocks of lumber. He intends to go as far as Florida, stopping at numerous mills on the way and getting in touch with the manufacturers.

William P. Lyons, an attorney of this city, has been appointed receiver for the Broadbent Brothers Manufacturing Company, maker of mantels and tables at President, Aliceanna street and East Falls avenue. Mr. Lyons bonded in the sum of $25,000. The corporation was formed about eighteen months ago with Felippe A. Broadbent as president and a capital stock of $25,000 to take over the manufacture of mantels from the Felippe A. Broadbent Company, which had previously carried on the business. The making of tables was added. Under the new arrangement the manufacturing company leased the factory building from the Felippe A. Broadbent Company, which was the parent company, having established the business. The manufacturing company also furnished electric current for various other concerns in the establishment, which covers a large area. For some time past the company has been slow in meeting financial obligations, according to report current here.

The steamer Rowanmore of the Johnston Line on its last trip to this port, brought over an exceptionally large consignment of mahogany logs from South Africa. It consisted of three lots, one of them including 302 logs destined for Grand Rapids, Mich.; a second, of 34 logs, which went to the Erie Railroad for shipment to Western destinations, and a third of 42 logs, consigned to the Upson Walton Company. The bulk of these logs are intended for furniture veneers.

Chester F. Korn of the Korn-Conkling Company of Cincinnati, stopped in Baltimore last week on his way to New York, where he intended to sail on the big steamship Imperator for Hamburg. Mr. Korn will travel in part for pleasure, but it is also his intention to look after business. His stay abroad will cover several months.

H. P. Duker of Otto Duker & Co. has purchased the property on the southeast corner of Aliceanna and Eden streets, which embraces about 282 by 170 feet. Just what he will do with the property has not yet been decided, but it will likely be adapted to yard purposes. This will give the firm, which does a wholesale business and turns out much mill work, a space of about four and a half acres.

Richard P. Baer, senior member of the firm of Richard P. Baer & Co., with offices in the tower of the Maryland Casualty building, sailed for London on the steamer Minnehaha, with Mrs. Baer, and will stay abroad six weeks or two months. It was his intention on sailing to spend about two weeks in the United Kingdom, and after that to go over to the Continent, visiting various lumber centers. He will combine business with pleasure, studying trade conditions at close range.

F. L. Winchester, who is connected with the Montvale Lumber Company, the timber holding corporation of the R. E. Wood Lumber Company, Continental building, was in Baltimore ten days ago and conferred with the officers of the company in regard to some business matters. He stated that trade conditions in the section around Asheville, where he makes his headquarters, are satisfactory.

COLUMBUS

J. W. Rogers, a well known lumber buyer of Hattiesburg, Miss., visited Columbus wholesalers recently.

Secretary Benbow of the Sowers-Leach Lumber Company has returned from a vacation trip spent on the Great Lakes.

W. B. Sissons, sales manager of the Sowers-Leach Lumber Company says there is a fairly good hardwood trade in this territory. Prices are well maintained and there is no indication of weakness. He says the demand is the best in the northeastern part of the state.

A. C. Davis of the A. C. Davis Lumber Company reports a fairly steady demand for hardwoods with the price list upheld in most respects. He believes that future prospects are bright.

The Snyder Manufacturing Company of Logan, O., makers of furniture, has now placed in operation its new factory which was rebuilt recently. The former plant was totally destroyed by fire Dec. 19 of last year. The factory will employ 125 men and is one of the most important industries of Logan.

R. W. Horton, sales manager for the central division of the W. M. Ritter Lumber Company, reports a good demand for hardwoods both from yards and factories. In fact, trade is about evenly divided between the two sources of orders. Dry stocks are not large and prices are well maintained. Shipments are coming out as freely as the growing car shortage will permit. He says that August, 1913, was ahead of July of that year and also ahead of August, 1912, in volume of business.

F. Everson Powell of the Powell Lumber Company says trade is only fair in hardwoods and some weakness in prices has come about.

The Fassett Woodworking Company of Cleveland, O., has been incorporated with a capital stock of $10,000 to do all kinds of woodworking. The incorporators are C. A. Fassett, R. A. Fassett, C. F. Kirkbride, C. T. Austin and R. H. Reed.

Building statistics just completed covering operations in Columbus during the month of July show there was a decline in the aggregate cost of new work in this city of four per cent as compared with the same month last year. The number of buildings, however, showed an increase, being 284 in July this year against 246 in the same month of 1913. The aggregate cost of work last month was $421,945, against $423,883 last year.

The new lien law which has been in operation now for over a month has not caused any trouble to date. There is a great demand for the blank affidavit forms which are used in the operation of the law. These forms were prepared by the Ohio Lumberman's Credit Association, and are being distributed at the various Builders' exchanges over the state. Builders in other states are awaiting the outcome of the law in Ohio with considerable interest.

The Columbus Building Trades Credit Association company of Columbus, O., has been incorporated with a capital of $500 for the purpose of looking after credit ratings in Columbus and all parts of Ohio. The incorporators are Columbus lumbermen as follows: E. Doddington, F. M Koons, F. H. Lumbert, J. E. McNally and B. S. Benbow.

TOLEDO

The Booth Column Company is running full time and capacity in an effort to catch up with back orders with which the concern is still swamped. New orders continue to come in with unabated volume, the larger call coming from Maine, Canada and South Carolina. Interior columns are in especially heavy demand.

The lumber mills of the Gotshall Manufacturing Company, located at Archbold, O., were saved from destruction after a hard fight, a couple of weeks ago, when the little town was fire swept. The principal business section of the town was destroyed and the loss is estimated at $100,000. The Toledo mill of the Gotshall company was destroyed by fire last year.

William Merganthaler, a Fostoria, O., carriage builder, well known throughout this section, died Thursday, Aug. 21, at his home in that city, from typhoid fever. Mr. Mergenthaler retired from active business a few years ago. He is survived by a widow and four children.

The Toledo Bending Company continues quite busy filling its orders. The volume is not quite so heavy at present, which allows an opportunity to catch up. Small orders are frequent but there are few carload lots being called for at present. Farmers are still too busy in the East to think of buying but there is a fair demand from Western points.

INDIANAPOLIS

W. W. Knight of the Long-Knight Lumber Company has returned from a Canadian trip.

H. B. Burnet of the Burnet-Lewis Lumber Company and Mrs. Burnet have returned from a trip to the Virginia mountains.

The hardwood sawmill of the Lucerne Lumber Company, Lucerne, was burned August 28, the loss being $6,000 on which there was $1,500 insurance. The company supplies several table and chair factories.

Miss Ethel Carver, daughter of Mr. and Mrs. J. H. Carver, and Dr. William S. Richardson of Carthage, Ark., were married at the home of the bride's parents in Noblesville, Sept. 3. Mr. Carver has extensive lumber interests in the South.

Cedar chests will be manufactured by the Acme Manufacturing Company, which has just been organized and incorporated at South Bend with an authorized capitalization of $25,000. Those interested in the company are O. E. Julien, E. E. Burner and O. A. Burner.

The marriage of Miss Gertrude Martha Pruitt, daughter of Mr. and Mrs. O. M. Pruitt, to David Keller Hutchcraft of Lexington, Ky., took place at the home of the bride's parents in this city Sept. 3. Mr. Pruitt is president of the American Timber Products Company.

H. A. McCowan & Co. of Salem have bought thirteen walnut trees for a Berlin, Germany, customer from the McShane farm south of Carmel. The price paid was $500 and the price was the highest ever paid in this part of the state.

Elbert W. Shirk, general manager of the company, has been appointed receiver for the Indiana Manufacturing Company, Peru. The company manufactures refrigerators and suffered a loss of $160,000 during the March flood. The plaintiffs to the suit, which is a friendly one, are stockholders in the company and hold claims amounting to $102,000.

William E. Longley, state fire marshal, has asked Governor Samuel L. Ralston to issue a proclamation fixing Oct. 9 as fire prevention day in Indiana. The date is the forty-third anniversary of the Chicago fire.

Building operations suffered a slump of $188,000 in the city last month as compared with August, 1912. There has been a gradual decline in building operations during the last three months, although the first five months of the year showed large gains over the corresponding months of last year.

MEMPHIS

Further details regarding the plant to be established by R. J. Darnell, Inc., at Batesville, Miss., are to the effect that this will consist of a double band mill, a resaw and eight veneer machines. It was reported when the fire occurred at Memphis that this firm would re-establish the band mill at Batesville but that the veneer machines would be replaced at Memphis. The firm, however, has recently changed its mind in regard to using Memphis as an operating point and all the machinery will be installed at Batesville, which is close to the timberland holdings of the company. The order for the entire machinery and equipment has already been placed and this will be installed and placed in operation as soon as possible.

The car shortage is beginning to give lumber interests in this territory some trouble and indications are that there will be a decided scarcity of cars and general equipment in the near future. However, railroad men are inclined to take a little more optimistic view of the outlook. They say that they are meeting with unexpected success in securing return of cars which have been away from their own lines and these are being assembled on sidings and at the larger terminals in order that the roads may be in position to give good service when the crop starts moving, which will be within the next fortnight. There has been rather marked deterioration in the condition of the crop in the Mississippi valley territory during the past few days and prospects are not anything like so bright as they were a short time ago. This will have an ultimate bearing on the problem of securing enough cars but the shortage in the crop will not affect the maximum movement which must be expected within the next six or eight weeks. Lumbermen are therefore inclined to believe that they will have some difficulty in securing prompt and efficient service before the first of November despite the fact that traffic officials are disposed to believe that they have the situation well in hand.

There is no doubt that the railroad men are doing the best they can. In addition to the cars which have been brought in from other roads there have been many deliveries of new cars for lines in this territory. Furthermore, all of the roads have been busy getting their damaged cars repaired. Most of them have increased the forces at their car repair plants and the American Car & Foundry Company, which has been running short handed for a number of months, is now advertising for help to take care of the work that is to be done for the St. Louis, Iron Mountain & Southern and other roads operating in this territory. It is expected that the plant of this company will be operating on something like full time in the near future.

The shortage of cars always affects milling points outside of Memphis much sooner than Memphis proper. There are plenty of cars here now for all requirements but complaints are beginning to come in of lack of cars and insufficient motive power at some of the non-competitive points. Conditions in this respect are expected to become rather worse until the maximum crop movement has been passed and lumber interests are doing their best to govern themselves accordingly.

It is reported that there has been rather a decided increase in the movement of logs to Memphis recently by water and this is accepted as an excellent omen, especially in view of the prospective shorthandedness of the railroads. The river here has recently risen somewhat and advantage is being taken of the better water stage to bring out as much timber as is accessible for water transportation. Receipts have been coming from a number of directions but the best movement is from White river in Arkansas. The movement of timber by rail is not particularly large at the moment but the mills here are reasonably well supplied and operations are being carried on at a pretty full rate not only at Memphis proper but at milling points outside of this city.

W. H. Kennedy, president of the Kennedy Heading Company, New South Memphis, is suffering from rather severe injuries received while he was in his automobile on his way to his plant. The machine was struck by a southbound street car and thrown some distance. Mr. Kennedy suffered a number of cuts and bruises, and although it was at first thought that his skull was fractured, it is now said his injuries are serious but not as bad as feared when the accident occurred. His many friends are congratulating him upon the fact that he escaped much more serious consequences.

The Southern Hardwood Traffic Bureau, as the first fruits of its new campaign for members, has taken in the two following Memphis firms: Anchor Sawmill Company and J. H. Bonner & Son. This brings the total number of firms identified with the bureau to 67. George D. Burgess, chairman of the bureau, is absent from the city at present but on his return a vigorous campaign for new members will be launched in order that the total may be brought up to the one hundred mark. The bureau has accomplished much in behalf of lumber interests of the South and, because of the splendid showing it has been able to make, the governing board believes that new members can be secured with comparative ease, with the result that there is much confidence and optimism entertained by the campaign committee.

T. R. Pope, the manager of the newly formed Memphis Traffic Association, reports that the St. Louis, Iron Mountain & Southern has agreed to a substantial reduction in the rates on wooden handles shipped from Newport, Ark., and vicinity to Memphis. The new rates are thirteen cents cheaper on carload lots at sixteen cents against twenty-nine cents, while in less than carload lots the reduction amounts to three cents at thirty-two against thirty-five. Memphis is a big handle market and a large portion of the receipts comes from Newport and vicinity, with the result that a number of Memphis firms will profit handsomely by the reduced tariffs which are to become effective at once.

Bids will be opened within a week for the sixteen-story bank building to be erected by the Commercial Savings Bank & Trust Company, the estimated cost of which is $400,000. Work is to begin thereon shortly. The new annex to the Bank of Commerce & Trust Company building is actively under way and will be ready for occupancy by 1914. The Illinois Central is going steadily ahead with the new union passenger ter-



¶ Fitzgibbons & Krebs Patent Elevated Traveling Derrick propels itself on 28-ft. gauge track.

¶ No guy wires.

¶ Write to O. M. Krebs, Mallory Branch, Memphis, Tenn., or to P. F. Fitzgibbons, Chattanooga, Tenn., for pamphlet fully illustrating and explaining the derrick.

Also ask for list of users.

minal station which is to cost $1,800,000, and the Rock Island system is progressing with the building of the foundation for the piers of the new bridge to be constructed across the Mississippi at this point. This will involve an expenditure of several million dollars. The Rock Island is also engaged in building extensive terminals here which will involve a large outlay. The Illinois Central, too, is largely increasing its terminal facilities at Nonconnah, just south of this city, and there are a number of other important building projects under way, with the result that the showing is regarded as exceptionally encouraging. With large crops indicated and with the advance of about $12.50 per bale in the price of cotton during the past three weeks, there is a disposition among those engaged with the building trades to look forward to large activity in the immediate future. The so-called "dog days" have not had much effect on the stoppage of building projects and the summer is regarded as one of unusual accomplishments along this line despite the fact that the official reports of work done within the city limits have not borne out this idea.

Bank clearings for the twelve months ending Aug. 31 were the largest for any similar period in the history of the city by more than $16,000,000. Official reports show that sales of cotton during the twelve months in question showed a loss of more than $250,000, with the result that the gain in clearings is attributable to increased activity in other directions. Lumber interests made a very substantial contribution to the magnificent display, as their business was larger for the period in question than for several seasons preceding.

The Southern Lumber Company is making extensive repairs and improvements at its big plant at Warren, Ark. The latter is now closed down and will remain so until about the middle of this month. It has a daily capacity of about 100,000 feet.

The Enterprise Lumber Company, Corinth, Miss., has just completed the installation of a roughing machine recently received direct from the factory.

Among the prominent buyers in Memphis recently has been J. N. Woollett, president of the Aberdeen Lumber Company of Pittsburgh, Pa. Mr. Woollett believes that there is an active period ahead and predicts that the lumber business in the territory tributary to Memphis will be quite active during the next few months.

The Bradley Lumber Company, Warren, Ark., has let the contract for a new band mill and a band resaw to replace the double band mill recently destroyed by fire at that point. The decision of the company to establish a smaller plant than the one burned is due to the fact that the supply of timber owned by it is not large enough to last for more than two years. The company is identified with the Chicago Lumber & Coal Company.

NASHVILLE

The Artman, Nichols & Cox Lumber Company of Metropolis, Ill., has purchased the D. M. Jones tract of timberland situated near Indian Mound, the consideration being $6,000. The land consists of a tract of unusually fine oak, which will be developed at once and shipped to a furniture factory at Grand Rapids.

The Clear Creek Coal & Lumber Company has filed a voluntary petition in bankruptcy in the United States district court at Nashville. The liabilities amount to $70,000, including bonds to the amount of $50,000, and assets are valued at $200,000. The company owns 6,500 acres of timber and mineral land in Cumberland county. Its offices are at Isoline, Cumberland county.

The B. G. Hale Lumber Company of Hickman, Ky., in order to avoid an exorbitant rate of fire insurance, has removed its yards from its old site to a lot formerly used by the Hickman Wagon Company. At the old site the firm had to pay $7.50 per $100 for insurance, which was almost prohibitive.

Fire destroyed the plant of the Tellico River Lumber Company, near Tellico Plains, causing a loss estimated at $150,000, which was partially covered by insurance. The plant employed 450 men, and was one of the important industries of that section.

The West Kentucky Coal Company will have thirty barges built at its plant at Paducah, and has recently let an important contract for material. An order has been placed for 660,000 feet of fir timber, 300,000 feet of yellow pine and 150,000 of white oak of heavy grade for steamboat construction. The barges are to be completed within ninety days.

The sawmill of Smith & Hogan, near Green Hill, Warren county, Kentucky, was completely destroyed by fire. The mill was one of the largest in that section, and the loss was total, as the firm had no insurance.

BRISTOL

The R. E. Wood Lumber Company of Baltimore will soon be operating a new band mill at Earharts, six miles south of Bristol, near where the company has purchased a large area of hardwood timberland. It has other operations in West Virginia and North Carolina and formerly operated on a large scale in Carter county, Tennessee.

The Bristol mills, with one or two exceptions, are all unusually busy. Shipments from here have been good all during the summer. Managers of the local offices of eastern concerns report that they are doing a splendid business in this territory.

R. L. Bonham of Chilhowie, Va., is cutting a large amount of stock in the Holston mountains east of Bristol. The stock is being hauled to Bristol on huge motor trucks and is being shipped out over the Norfolk and Western road.

The Pittsburgh Lumber Company is operating on a large scale at Hampton, Tenn., where it is turning out 75,000 feet of stock daily. The company has about ten years' cut of splendid timber, consisting mainly of hardwoods and hemlock.

Bluestone Land & Lumber Company
MANUFACTURERS
WEST VIRGINIA HARDWOODS
Soft White Pine, Oak, Poplar, Chestnut, Hemlock
Band Sawed Stock
MILL FACILITIES COMPLETE PLANING
RIDGWAY PENNSYLVANIA

MEMPHIS

E. Sondheimer Co.
Wholesale Manufacturers and Exporters
RED GUM
SAP GUM
COTTONWOOD
CYPRESS
ASH
PLAIN OAK
QUARTERED OAK
HICKORY
SOFT ELM
SYCAMORE
All Grades and Thicknesses
We make a specialty of mixed cars of Sap and Red Gum, One-half to Two inches thick.

VANDEN BOOM-STIMSON LUMBER COMPANY
Manufacturers Southern Hardwoods
Red Gum a Specialty
Memphis Tennessee

TIMBER ESTIMATES
REPORTS INCLUDED
TOPOGRAPHICAL MAP, DETAIL ESTIMATES & WRITTEN REPORT
GARDNER & HOWE
ENGINEERS
Clarence W. Griffith Department Manager, Porter Building. Memphis, Tenn.

The Mossman Lumber Co., Inc.
Manufacturers
plain and quartered red and white oak, ash, gum and poplar.
ALSO FULLY EQUIPT DIMENSION PLANT
Memphis, - - Tenn.

The Wilkinson planing mill on the Southern railway, which was purchased by the Stone-Huling Lumber Company, will be put into operation again in a few weeks. It is being equipped with new machinery. The Stone-Huling Company will later discontinue its old mill on the Southern railway.

Irving Whaley of the Whaley-Peed Lumber Company has gone to eastern Kentucky to spend several weeks looking after the installation of new mills. The new company has purchased a good sized area of hardwood timber in that territory.

H. E. Pierpont of Chicago, general freight agent of the Chicago, Milwaukee & St. Paul railway, who is interested in the Paxton Lumber Company, of this city, is a visitor in Bristol this week on business. The Paxton company is doing a good business.

J. A. Wilkinson, who is conducting a large hardwood agency, as representative of a number of large domestic and foreign concerns, has returned from a two weeks' trip. Mr. Wilkinson is shipping out a large amount of stock for the concerns he represents and has several inspectors in Virginia and West Virginia taking up the stock at the mills.

LOUISVILLE

The Louisville Hardwood Club will have an exhibit at the Kentucky State Fair, September 15-20, in Louisville. State Forester J. E. Barton is arranging a display of products of the forests in this state, and called on the club to co-operate. This the organization agreed to do, and the result is that work is now being done which insures an excellent display by the local lumbermen. The plan is to show a board of each kind of wood native to or manufactured in Kentucky. This gives a wide scope to the exhibit, and promises to give a display that will put most people, even those familiar with the average woods, to thinking. Each board will be dressed for two-thirds of its length, and finished for one-third, so that the three stages of its appearance from the time it leaves the sawmill until it is ready for use will be presented to the observer. This idea was suggested by T. Smith Milton, sales manager of the Louisville Point Lumber Company, who is in charge of the work of getting the exhibit together. The Alfred Struck Company is doing the dressing and finishing. The woods to be shown include mahogany, cypress, pine, dogwood, ash, sycamore, plain and quartered; white oak, plain and quartered; red oak, plain and quartered; maple, poplar, elm, willow, basswood, locust, beech, buckeye, hickory, cottonwood, birch, cherry, butternut, pecan, walnut, black gum, mulberry, elder, chestnut, coffee tree, sassafras, cedar, cucumber, hackberry, persimmon, gum, plain and quartered red, and sap.

Much interest has been shown locally in the report of the Census Bureau, which indicates an advance during 1912 by Kentucky in point of lumber production. The cut last year was 641,296,000, a gain over 1911 of nearly 9,000,000 feet. The fact that eastern Kentucky as a lumber producing section was just being opened up in 1912 means that this year's cut will be much larger than last. Another factor favorable to an increased output is that Kentucky river mills handled a larger volume of logs this year than for a long time, getting enough to keep them running almost without a break. Crop conditions have not been particularly good, and plenty of labor and horses has been available, and the result of this has been that many small country mills which have not done much lately have run most of the summer. Railroad reports are that an unusually large number of logs, as well as much lumber, has been brought out to their stations from interior points, all signs indicating a large movement. Just now some of the smaller millmen are discontinuing operations because of the comparatively easy condition of the market; but their contributions, as a whole, to the year's cut have been material.

A brief has been filed for the Norman Lumber Company and other local hardwood concerns in the case of those companies against railroads in the Southern and Central Freight Association territory. The brief attacks the present adjustment of bridge tolls, as a result of which it is alleged that Louisville is discriminated against severely. The brief says, among other things: "We submit that the discrimination against Louisville is due to the failure of the carriers serving Louisville and Cincinnati to the North and East to recognize the well-established principle, that differentials diminish with increasing distance and vanish when the mileage on which the differential is based becomes inconsiderable in proportion to the total mileage from the basing point to destination. If this principle were recognized, the bridge toll would disappear on long hauls and the differential between Louisville and Cincinnati on east-bound traffic would diminish as the distance increases. We insist that there is remedy for the intolerable rate adjustment under which Louisville suffers and that this commission should apply it."

T. M. Brown of the W. P. Brown & Sons Lumber Company has been in Chicago during the past week. Mr. Brown plans to go east to attend the world's series baseball games next month.

D. E. Kline of the Louisville Veneer Mills has returned from Chicago, where he attended a meeting of the Panel Club, of which he is a leading member.

Harry J. Gates of the Louisville Point Lumber Company has returned from a trip to eastern points, in which he found the demand for lumber to be satisfactory.

P. G. Booker, president of the Booker-Cecil Company, is rapidly improving after a severe attack of typhoid fever and will probably be out again shortly.

Saline River Hardwood Co.

Main Sales Office

Pine Bluff, Arkansas

Manufacturers of

Genuine Forked-Leaf White Oak

Red and Sap Gum
Red Oak and Ash

¶ We offer to the trade a remarkably SUPERIOR lumber product.

¶ Our TIMBER is virgin forest growth of the highest type.

¶ Our MILLS are new and produce accurately manufactured stock.

¶ Our LUMBER is all KRAETZER-CURED—treated with steam under pressure directly from the saw—insuring quick drying to light weight, freedom from seasoning defects and stick-marking, splits and stain.

¶ Kraetzer-cured lumber will "stay where you put it."

¶ Dry kiln and oak flooring plant in connection.

¶ We solicit the inquiries and orders of critical and discriminating buyers.

¶ For straight cars of Yellow Pine, or mixed cars with Oak Flooring, write LONG-BELL LUMBER COMPANY, Kansas City, Mo.

Two Factors With Which You Are Familiar Regulate Timber Values

Supply—it cannot increase during the life of this generation.

Demand—for wood and wood products will not decrease during the life of this generation, if ever.

Caught between these two forces which are moving toward each other steadily, timber values literally are being

Shoved Up

by the pressure behind them.

For these reasons timber is a good investment whether bought for present or future operation or as an investment.

Timber now is being offered at prices which will make your investment profitable, not in many years but in a few years.

You are entitled to information about timber bargains. Ask for it.

James D. Lacey & Co.

Timber Land Factors

Chicago, Ill., 1750 McCormick Building
Portland, Ore., 1104 Spalding Building
Seattle, Wash., 1009 White Building

The North Vernon Lumber Company is again running its Louisville sawmill. It is in charge of Charles Platter, one of the officers of the company.

The Edward L. Davis Lumber Company is running its sawmill at night, having a large supply of logs on hand. It is especially pleased with the character of the oak timber it has been able to buy.

The C. C. Mengel & Bro. Company has discontinued night work after a long run.

ST. LOUIS

Receipts of lumber in St. Louis during the month of August, as reported by the Merchants Exchange, were 18,402 cars. During August last year the receipts were 18,114 cars, showing a gain during August this year of 288 cars. Shipments of lumber by rail last month were 12,729 cars. A year ago the shipments were 13,305, showing a falling off this year of 576 cars.

CINCINNATI
Hardwood Manufacturers and Jobbers

The Kosse, Shoe & Schleyer Co.
WALNUT, OAK, AND OTHER HARDWOODS
103-4-5 CAREW BUILDING

OHIO VENEER COMPANY
Manufacturers & Importers FOREIGN VENEERS
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ARE YOU ALIVE
to the "Service" (in all its details) you can secure from us on Oak, Gum, Poplar and other Hardwoods?
BETTER GET IN TOUCH WITH US
THE M. B. FARRIN LUMBER CO.

CONASAUGA LUMBER CO.
MANUFACTURERS HARDWOOD AND PINE
FOURTH NATIONAL BANK BUILDING

Johns, Mowbray, Nelson Company
OAK, ASH, POPLAR & CHESTNUT
GUM AND COTTONWOOD

C. CRANE & CO.
MANUFACTURERS HARDWOOD LUMBER
1739 EASTERN AVENUE

DAY LUMBER & COAL CO.
Mfrs. YELLOW POPLAR and WHITE OAK
GENERAL OFFICE—CLAY CITY, KY.

RIEMEIER LUMBER CO.
OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

SHAWNEE LUMBER CO.
HARDWOODS, WHITE PINE and HEMLOCK
Sales Office—South Side Station—C. H. & D. R. R.

JAMES KENNEDY & CO., Ltd.
OAK, POPLAR AND OTHER HARDWOODS
FIRST NATIONAL BANK BUILDING

W. W. Dings of the Garetson-Greason Lumber Company left recently for a trip to the mills of the company in Arkansas. Before going he stated that the company was having all the business it could handle. The car shortage has commenced to be felt and although it has not handicapped them seriously, they are slow in getting out some of their orders on this account. They have just finished the installation of an eight-foot band mill at their Wasson plant and it has started up. Owing to the heavy demand that has been made on them for some time, their stocks have been greatly reduced. The railroads and car manufacturers are coming in quite liberally with orders.

E. H. Luehrmann of the Chas. F. Luehrmann Hardwood Lumber Company is up North on his vacation. G. E. W. Luehrmann has just returned from a business trip to Chicago. He says his company is having an increased demand for nearly every item on the hardwood list. Oak, ash and gum are in good request and bringing good prices. He is well pleased with present conditions, considering the weather has been so unseasonably hot and sees nothing but a fine fall trade in sight.

Geo. E. Hibbard of the Steele & Hibbard Lumber Company, reports a seasonable call for hardwood lumber which is bringing very good prices. L. M. Burgess, secretary of the company, left Monday on a selling trip through Iowa, Minnesota and northern Illinois. He will be gone for five or six weeks. Mr. Steele, who has been in the East on his vacation, returned this week.

J. T. McRoberts, sales manager of the Hooton Hardwood Lumber Company, has been away on two trips recently. He was up in Iowa, Wisconsin and northern Illinois on his first trip and later on took a run up to Kansas City and the western part of the state. He says considerable lumber is being bought by consumers and that the prospects are very good for a nice fall trade.

Frank G. Hanley recently returned from a trip to New Orleans and vicinity. He says the car shortage is beginning to be felt in that section and from present indications it will be very acute before traffic conditions become normal again. Cotton, rice and sugar are being given preference by the railroads and lumber has to await their pleasure. As the crops are very heavy it will probably be some time before lumber can be shipped out as rapidly as the manufacturers desire. Mr. Hanley found dry cypress very limited in quantity and continuous and heavy rains prevent the stock from drying out.

ARKANSAS

The handle and stave plants of Corning, Ark., have resumed operations, some of them running both day and night shifts.

The Southern Piling Company of Camden, Ark., has recently been incorporated with a capital stock of $10,000 fully paid up. The officers of this company are R. C. Powell, president; J. E. Van Cleave, secretary-treasurer and general manager; M. D. Wright, H. S. Powell, all of Camden, and B. H. Chrass of New Orleans and E. E. Cole of Saginaw, Mich., being the other stockholders and members of the board of directors. This company has a considerable holding of cypress and pine timber near Camden, as well as several other timber holdings in southern Arkansas. The company will do a general business in cypress and yellow pine piling. A one-line ground skidder of the Clyde Iron Works make has been ordered and the company will begin operations at an early date.

Following the ruling by the Supreme Court of the United States, by the terms of which decision the Arkansas Railroad Commission's Standard Freight Distance Tariff No. 3 was made effective in July of this year, five of the principal railroads in Arkansas have made application to the Railroad Commission to have Distance Tariff No. 3 revised. The railroads have prepared a proposed rate, and in some cases a reclassification, which will place freight charges on a higher basis than that fixed by the Railroad Commission tariff. It is said by the railroads that the commission's tariff was suitable to the conditions existing a few years ago, namely, in 1908, when the Standard Freight Distance Tariff No. 3 was made, but that it is now too low to enable them to make a profit as carriers between intra-state points. The railroads hope to be able to induce the commissioners to raise the rates as proposed in their new tariff. The business men of the state are strongly protesting against a revision of the tariff, and their interests are being represented by the freight traffic bureaus of the various cities throughout the state. A conference between the representatives of the various traffic departments of the railroads in Arkansas and the various managers of traffic bureaus of the cities in the state, together with the members of the Arkansas Railroad Commission was to be held in Little Rock on Sept. 2. This meeting, however, was postponed until Monday, Sept. 15. At that time a hearing will be had and definite action taken by the Railroad Commission of Arkansas.

On Aug. 27, Judge Z. T. Wood of the Chicot County Chancery Court issued an injunction against the American Forest Company to prevent that company from violating the provisions of a contract which it had entered into with the Cincinnati Cooperage Company, agreeing to transport over the Forest company's private line of railroad all timber handled by the Hudson & Dugger Company of Memphis, purchased from the Cincinnati Cooperage Company. The American Forest Company is a New York corporation operating in Chicot and Drew counties, Arkansas. The Cincinnati Cooperage Company also owns several thousand acres of land in southeastern Arkansas. The injunction grew out of the refusal of the American Forests Company to transport over its line the timber cut and

handled by the Hudson & Dugger Company of Memphis. The Hudson & Dugger Company, as assignee of the Cincinnati Cooperage Company, was undertaking to carry out the terms of the contract entered into on Apr. 10, 1913, by the American Forests Company and the Cincinnati Cooperage Company, the interest of the latter concern having been sold to the Hudson & Dugger Company. In the contract, it is said, the Forests company agreed to handle the timber in consideration of the cooperage, conveying all the timber on the land, save the white oak, for the contract price of two cents per hundred pounds. The American Forests Company refused to handle the timber for the Hudson & Dugger Company on the ground that the Cincinnati Company had transferred its interest without right and without the consent of the American Forests Company to Hudson & Dugger.

The Myers Stave and Manufacturing Company of Paragould has recently filed articles of incorporation with the secretary of state of Arkansas and received a charter. The capital stock of the new concern is fixed at $25,000, of which $15,000 has been subscribed. The officers are J. M. Myers, president; G. W. McMillion, vice-president; J. R. Myers, secretary-treasurer.

The Kennedy Heading Company has purchased machinery for a large plant to be erected near Olena, Ark. Lumber is now being shipped to Olena for the construction of the plant. The company will also erect a general merchandise store at that place.

The Sutton Stave Company of Heber Springs, Ark., has recently been incorporated with a capital stock of $10,000. The officers of the concern are Geo. H. Welch, president; John W. Welch, vice-president, and S. G. Sutton, secretary and treasurer.

MILWAUKEE

Fred S. Underhill, receiver of the Harding-Finley Lumber Company of Philadelphia, has presented a claim of $47,000 against Oswald Sommer, alleged heir to a $23,000 estate of Carl Neuman in a petition for a citation against Sommer. According to the petition, Walter H. Harding and John P. Pfeiffer entered into a partnership on July 2, 1912, and by the terms of the contract Pfeiffer agreed to offer toward his share of the partnership a claim of $47,000 said to have been obtained in a judgment rendered against Sommer in the Court of Common Pleas in Philadelphia on April 19, 1912. Pfeiffer is alleged to have turned over the claim to the lumber firm, which was included in the assets at the time of the appointment of a receiver.

A new law which becomes effective Jan. 1, 1914, will rapidly exterminate wooden coaches from trains in Wisconsin. The Legislature enacted a law prohibiting the operation of wooden coaches between steel cars upon petition of the railway mail clerks, express and baggagemen. The state railroad commission is given power to extend the time to any single railroad upon application and hearing. All-wood car trains will not be affected by the law as it applies only to mixed car trains.

The Phoenix Manufacturing Company of Eau Claire has received another order for one of its log haulers from a foreign concern. Last year one was sent for use in Finland and now one will be made for service in the forests near St. Petersburg, Russia. At present the company is constructing four log haulers for the McIntire Iron Company, North Creek, N. Y., where they will be used next winter with several carloads of sleds, also products of this concern.

A big, new dry kiln is being erected to the plant of the Mandt Wagon Company at Stoughton. The woodwork is being done by employes.

The Brooks & Ross lumbering interests have acquired a 13,000 acre site near Bowler which contains about 70,000,000 feet of mixed timber, mostly hardwood. The property was at one time owned by George B. Matton and is known as the Matton tract. The Wisconsin Timber Company or the Northern Furniture Company, of Sheboygan, were the latest owners. The sale included several miles of railroad and was consummated at a price of over $300,000, it is said. The Brooks & Ross mill is situated at Schofield, about thirty-five miles distant from the holding. The timber will be brought to this mill to be sawed.

An opinion given the Merchants and Manufacturers' Association by the state industrial commission in reference to the workmen's compensation law is of interest to the lumbering as well as other industries. The ruling is in reference to commission salesmen and holds that they are not classified as employes. "Salesmen who sell goods on commission are not classed as employes under the provisions of the workmen's compensation act. Unless the person is in the service of the employer under contract of hire, he is not to be considered an employe under the act. If traveling salesmen are in the service of the employer under a contract of hire they are to be considered employes under the act, and in case they receive injuries while in the performance of service growing out of or incidental to their employment they are entitled to the benefits of the compensation act," according to the opinion.

The C. F. Kade Fixture & Show Case Company, recently organized at Plymouth by C. F. Kade of Sheboygan and local capitalists, has acquired the land, plant and equipment of the old Plymouth Veneer Company. The plant is equipped with modern dry kilns, machinery, sprinkler, heating and electric lighting systems, contains 32,000 square feet of floor space, is located between the Northwestern and Milwaukee road lines with side track facilities and will be in operation shortly.

The last of the holdings of the Daniel Shaw Lumber Company were disposed of and the affairs of this famous and historic enterprise were

GUM—OAK—ELM

Thick or Thin

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THIS IS WINTER CUT AND VERY GOOD

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Perfectly dried and worked

Made from our own timber from one boundary, insuring uniform color and texture; manufactured at our new hardwood flooring plant.

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Specialties
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Milwaukee, Wisconsin

practically wound up at the auction sale conducted at Eau Claire on Aug. 20. The closing up of the affairs of the Shaw company means the passing into history of one of the oldest and last of the old-time lumber firms of the Chippewa valley. This lumber company was established in the year 1858 by Daniel Shaw, who had associated with him Charles A. Buller, at present a resident of Eau Claire and in his eighty-eighth year. Eau Claire was at that time hardly a scattered village. The timber holdings were extensive along the Chippewa and Flambeau rivers. At the death of Daniel Shaw the business continued under Eugene Shaw. With the death of the latter the plant has been taken over by the John H. Kaiser Lumber Company, which will next season start up the mill in addition to its present mill. The rumor to the effect that the Edward Hines Lumber Company had purchased the local interests of the Kaiser concern were denied by the officials of the latter concern. The cause of the laying off for sixty days of between 150 and 200 men engaged in summer logging operations is laid to the inability to secure steel rails necessary for summer logging. As soon as rails can be secured logging operations will again be resumed and both mills will be run. At present only sufficient logs are on hand to keep the old mill running until freeze-up time.

G. P. Kraft of Merrill has closed a contract with the Brooks & Ross Lumber Company of Schofield for a two years' logging job on the shore of Wild Cat lake. Employment will be given to 100 men.

Improvements costing in the neighborhood of $5,000 are being made to the plant of the Gurney Refrigerator Company on Forest avenue, Fond du Lac. Excavation work for the 100-foot brick smokestack and a 24 by 48 foot brick boiler house is under way, while work on the shaving room is expected to begin within a short time. New boiler room equipment will also be provided for the boiler house under construction.

N. S. Werner, for many years connected with the Wilbur Lumber Company of Waukesha and elsewhere in this state, has purchased the Wilbur yard at Mapleton, north of Oconomowoc and will launch into the lumber business under the style of the Werner Lumber Company. His son Nicholas will assist in conducting the business.

The Hardwood Market

CHICAGO

The majority of local venders of hardwoods consider trade pretty dull. This is owing to the fact that it is just as difficult to secure desirable lines of stock for sale as it is to market them. On the contrary, some local dealers who are well-equipped with sources of supply say that their trade is normal. However, all report that the volume of business is made up of a large number of small orders rather than large blocks.

The local foreign wood, veneer and panel men are enjoying an excellent and satisfactory trade. This is brought about from the fact that there is an excellent demand from the furniture and kindred woodworking factories as well as nearly a normal demand from the interior finish plants.

NEW YORK

It may be straining a point to say that the local hardwood market shows improvement, but the past two weeks have shown a quickened demand and better prices in some items. Ash, which has been in the front of late, holds its place and some advances are reported. Birch is scarce and firm in price. Plain oak shows some recovery from its recent slump and quartered stock is rather slow. Other items on the lumber list remain unchanged, the demand being for immediate needs. The flooring market remains firm with oak flooring advanced in some grades; maple flooring is firm and in good demand.

BUFFALO

The hardwood trade has been showing a little improvement within the past two weeks, although it is not very active as yet. Inquiry has become somewhat more active and there has been a fair trade for the season, mostly in mixed cars. Buyers adhere to the policy of taking stock only in a small way and they are likely to follow this plan for the immediate future. When the tariff bill is settled there is likely to be some larger buying. Cars have been plentiful enough in this market thus far, but a scarcity is looked for within a short time.

The chief wood in demand is plain oak, which holds fairly firm in price, although not so stiff as some time ago. Brown ash, maple and birch are among the other leading woods. Low grades of most woods are bringing good prices and there is a scarcity of stock. Flooring in oak, maple and beech is selling well at firm quotations. Very little lumber has come in by lake this season, on account of the high prices.

PHILADELPHIA

There is no change to report of any magnitude in the hardwood situation since a fortnight ago, further than that a great many inquiries are coming in, very obviously for the feeling out of the market, and which

in many instances result in orders where a certain desired wood can be secured at satisfactory prices. There is no inclination to rush in for bargains, although some tempting offers have recently been made on a strictly cash basis, as the buyer still holds tenaciously to the belief that a further shading in prices is likely. The tariff turmoil, the currency agitation, labor strikes and the tight money market, naturally have an effect commercially, and the sure advance in trading always expected with the advent of the fall season cannot be counted upon with the usual certainty, but conditions at the mills are such as will prevent a slump in prices, and however gloomy the situation may seem from certain points of view, it is admitted in spite of all that the hardwood market is in fair shape. Yards are fairly well stocked and buying is on a conservative basis. The wholesale trade in general is optimistic as to outlook.

Oak continues the leader, although there has been some shading in certain lines; chestnut holds steady; ash is firm; basswood in fair demand; gum is making new friends; cherry is not so active, although offered at reduced prices; birch and beech are unchanged from a fortnight ago.

PITTSBURGH

Hardwood men in this city are decidedly optimistic. There is no question but that the market is in good shape, much better than for years. Prices are steady at prevailing quotations and higher figures are looked for in the near future in many lines. Oak is selling for more than it ever brought in Pittsburgh before. There is some talk of raising prices this month on furniture woods, many of which are quite scarce. Hardwood mills are busy and are preparing for a large cut this fall. Purchasing agents have been coming into the market the past few days in a way that shows they will be steady buyers of lumber if they can get it this fall. The fear of a car shortage is urging them to call for early deliveries. Yard trade is not what it should be but has improved a little during the past two weeks.

BOSTON

There has been very little activity in the market for hardwood lumber during the past two weeks. This is really the time of the year when an improvement in the demand is usually experienced but for one reason or another the average buyer cannot be induced to place contracts in anticipation of future requirements. All buyers are in the market for small lots from week to week which in the aggregate foot up very well. The manufacturers of interior finish are doing a fair amount of business and have a good volume of new work in sight. Furniture manufacturers, according to salesmen who have been calling upon them, appear to be moderately busy but cannot be induced to operate with any freedom. The high asking prices which are in force on all grades of hardwood lumber tend to check any tendency toward speculative buying. From reports received from manufacturers of hardwoods it is learned that there is little chance for any lower prices. The offerings of the desirable grades of lumber are small and holders are confident that there will be demand for all they have to offer.

Plain oak and quartered oak continue in demand at firm prices. There does not appear to be any one kind of hardwood lumber that is in exceptionally good call at the present time.

BALTIMORE

The hardwood trade remains in decidedly encouraging shape, orders being received with sufficient freedom to avert accumulations at the mills and the prices realized affording fair margins of profit. Some members of the trade are disposed to take an unfavorable view of the situation and state that the demand is not what it ought to be, while the quotations have declined to about the prices that prevailed last year at this time, but a majority at least of the manufacturers take a most hopeful view of the situation and declare that they are getting as much for stocks as before and that the requirements of the trade are of sufficient volume to absorb the output, enabling the mills to continue operations without risk of troublesome accumulations. Here and there a particular grade or a size may lag, but in the main there is said to be no cessation in the inquiry; in fact, the latter appears to have become more active of late, and serves to keep the trade as a whole in good shape. The northern markets, which for a time showed a tendency to hold down, appear to be receptive once more. Yardmen who had concluded that they had enough lumber on hand to keep going for a time have evidently decided on further additions to their stocks; and as these would certainly not be made if the lumber were not moving, it is a fair presumption that the outgo is of satisfactory proportions. The assertions of some of the hardwood men that sound wormy chestnut and other divisions of this wood had sagged are contradicted by others, who contend that they are getting as much for their lumber as ever before and that they experience no difficulty in placing the lumber turned out. It is much the same with oak, which, with the exception of wagon oak planks in the foreign markets, is moving with sufficient freedom to avert any real weakness. Of wagon oak planks there has been such a heavy shipment as to keep up the congestion on the other side. The forwardings of low-grade poplar are also heavier than they

RED GUM

A few words to the users of this excellent wood and those who contemplate using it.

Many years' experience in the manufacture and marketing of this item of stock have satisfied us that in this wood, more than in any other hardwood, the successful consuming manufacturers insist upon having only **high quality** stock —not only as to grade, but manufacture and careful handling while in pile for seasoning.

Choice logs do not always produce good lumber—it depends largely upon how much care is exercised in the process of manufacture; nor does the production of high quality stock end here—it must be carefully put into piles and sufficient piling sticks used to insure its drying out flat.

When you are about to place an order for Gum, some of the essentials that suggest themselves to you are:

Full and uniform thickness.

Very dry stock that in process of drying has remained flat and straight.

Good range of widths and lengths to assure you of a good yield of clear cuttings of various sizes you require.

Last, but not least, after placing orders you want them executed promptly and on time—also honest grading and measurement.

We are equipped with six band mills, backed by our own timber lands, to give you that kind of stock and unexcelled service.

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¶ Kraetzer-Cured lumber is susceptible of being thoroughly air dried or kiln dried in less than one-half the time ordinarily required for seasoning unsteamed wood.

¶ Kraetzer-Cured lumber does not case-harden, check, end-split or stain, and dries without warping or buckling.

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¶ Kraetzer-Cured lumber will neither shrink nor swell, and the grain will not raise when water stains are employed in finishing.

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TRADE MARK

Kraetzer-cured LUMBER

should be, and stocks have piled up. But in the main the outlook is better, the ending of the Balkan complications and other recent developments having helped the trade. This is also the case in the domestic business, the tariff bill being much less of a disturbing factor than it was. Business is still held back by the Mexican complications, but even there the outlook is better and the expectation is held out that further improvement will be noted in the near future. Many of the buyers and consumers of lumber are getting back from vacations, and it will not be long before the summer quiet is entirely at an end. The curtailment of the production has been generally helpful, and there is a fair prospect that by the time the output becomes normal again, not the slightest difficulty will be experienced in finding takers for it.

COLUMBUS

Hardwood trade in Columbus and central Ohio has been fairly active during the past fortnight, considering the time of the year. There has been a steady demand for all varieties and grades, both from the retailers and from factories. The movement is as good as could be expected and the prospects for the future are bright. The tone of the trade is satisfactory and no bad features have developed in any quarter.

The best feature of the trade is the active building operations which are reported from every section of the state. Contractors and material men are busy and will be until the bad weather sets in. This fact is one of the big factors in maintaining the market for all varieties of lumber. Dealers' stocks are light and their policy is to buy only what is wanted for immediate needs.

Manufacturers, especially those engaged in making furniture, vehicles and implements, are also buying hardwood stocks. Furniture concerns have experienced a pretty fair trade at the shows and they will undoubtedly be good purchasers in the future. Other factories are also buying stocks. Dry stocks are not heavy and there is no particular accumulation in any quarter. The worst feature is the growing car shortage which is continually delaying shipments.

Quartered and plain oak are both in good demand and prices are firm. Chestnut is also moving well and strength characterizes prices, especially in sound wormy. Poplar is moving better and the lower grades are growing scarcer. Ash and basswood are both in fair demand with prices firm. There is a good demand for other hardwoods.

CINCINNATI

Although it is hot, weather conditions are favorable to business. Crops in the surrounding territory are doing nicely. There has been a satisfactory harvest up to this time and the growing corn is in splendid shape, indicating a fine yield. The iron and steel industry is showing much improvement as are most other lines of trade. Most complaints heard are regarding collections which are unusually slow. The banks have plenty of money but are requiring abundance of security before loosing up. This is not having a good effect on most branches of trade but it is believed that with the passing of this seeming uneasiness which appears to be lessening as fall approaches, there will be more opportunity for satisfactory collections and consequently a more elastic exchange with better general business conditions.

The teamsters strike, while not officially called off is a thing of the past, most of the men being back at work and the places of the holdouts being filled as rapidly as men can be found to drive teams. There is little interruption to delivering and the situation grows better daily.

While there is little actual improvement in the hardwood situation dealers feel much encouraged over the indications of a much better and steadier demand. Continuous inquiries will surely result in better business. Buyers are feeling out the market and really need more stock than they are buying right now. Prices are satisfactory and supplies are plentiful but no overstocking is noted anywhere. At mill points, manufacturers are going right ahead and there is none too much dry stock either at the mills or in the big hardwood yards here. The better grades of poplar and red gum are slowest to move, while the lower grades of each wood move satisfactorily, which is also true of cottonwood. Ash is quite active and rivals plain oak as the best seller. Quartered oak is in good demand. The local demand for the better grades for hardwood finish is excellent.

TOLEDO

The hardwood market continues fairly active but there are no distinguishing features. Most of the local yards are fairly well stocked and there is little present buying except of the hand-to-mouth variety. Prices continue to hold up in good shape and there is a good tone that is highly encouraging. Building has been unusually heavy in small residence construction throughout the season and there is probably not a city in the country which can boast of a finer line of small homes than Toledo. There are hundreds of small seven and eight room houses in Toledo that are perfect gems of architectural elegance and simplicity. Hardwoods play an important part in the finish of these little homes, and no expense is spared in making these homes beautiful and sanitary. Hardwood finish and floors go far along these lines. Plain oak is leading the demand in both the white and red varieties. Factory call is good.

INDIANAPOLIS

The local hardwood situation continues to improve gradually but the trade has not yet reached the volume that was anticipated. Many inquiries are being received, but dealers and large users of hardwoods are showing a reluctance to place large orders at this time.

It is believed that conditions will improve during the next few weeks. Thus far there are no indications of a car shortage, which may be responsible to some degree for dealers holding off. Shipments are being received promptly.

Prices are remaining steady and there have been no changes in quotations for several weeks. When more activity is seen, it is believed a slight increase may follow and this is being used as one argument for placing orders for fall delivery at this time.

MEMPHIS

The hardwood market continues about the same as recently. There is no large buying in progress but inquiries are increasing and these are regarded as the forerunners of greater activity in the immediate future. Prices have undergone practically no change during the past fortnight. There is no large surplus of hardwood lumber and there is no pressure on the part of holders to sell, with the result that prices are generally well maintained. There is a good demand for both plain and quarter-sawed oak and offerings are not large. The call for the upper grades of red gum is rather poor at the moment. This is regarded as largely due to the less active export demand. Large quantities of this lumber have been going to Europe during the past year and the falling off in demand from that quarter has had a slightly depressing effect thereon. Sap gum in the upper grades is in good demand and there is no difficulty about selling the lower grades of gum. The box factories are using large quantities of this lumber. One of the largest box manufacturers here said recently that the plants of his firm at Memphis were using a great deal more gum than cottonwood. The latter item in the lower grades is in good demand and offerings are not large. Box interests are in the market for the lower grades of cottonwood and report that they are receiving no large offers of stock. Ash sells readily and the cypress market is in healthy condition. There is a fairly active demand from Germany and Great Britain but the continent is a rather slow buyer and there are comparatively few exports in that direction.

NASHVILLE

There has been no material change in conditions in the Nashville hardwood market the past two weeks, with only a moderate volume of business being transacted. Local dealers express themselves as satisfied with the situation, and continue optimistic as to the future outlook. Oak continues to be the most active seller, with good demand for ash and hickory. Low grades of poplar have been moving. A fair amount of business is being handled in chestnut. The building trades are taking only a moderate amount of lumber, there being no unusual activity in this department.

BRISTOL

Lumbermen of Bristol report that there is a little more briskness in trade since the advent of September. They believe that business will improve slightly during the fall and winter. A large volume is now being done and they consider the outlook encouraging. The majority of the mills are busy and expect to make a splendid record during the present year, as market and manufacturing conditions have been very favorable. The country mills are busy and expect to run far into the winter.

LOUISVILLE

September is bringing satisfactory conditions in the hardwood trade, as far as the local market is concerned. Buying is being done more extensively by consumers, and inquiries for lumber are more numerous than they have been for several months. August was well up to expectations, holding its own with the two months preceding, and making a marked improvement compared with August of last year. The furniture factories are doing a large business, regard the outlook as favorable, and are buying accordingly. Other large consumers are in a correspondingly optimistic frame of mind, so that the situation at large is all that could be desired. Prices are in the main unchanged from two weeks ago. Quartered oak continues strong, and plain oak, especially common, is in good demand. Low-grade ash also is selling well, and some reports of good buying on firsts and seconds have been heard. Ash is continuing to move without much difficulty. Chestnut is generally slow.

ARKANSAS

The approaching fall promises the biggest crop in years in spite of the occasional statements as to the effect the continued dry weather is having on crop conditions. It is possible that the corn crop in Arkansas will not be a bumper this year, but other crops, including cotton, are especially good. Much activity is promised in the building line among all classes, both in the cities and in the country. The farmers are not by any means in a pessimistic frame of mind and are planning much new building and many improvements. Taking it all in all, crops in Arkansas are better than for a number of years. The rains have

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¶ We are just in receipt of fifteen cars of remarkably superior Circassian Walnut Logs, large size, well-figured and of good color, which are now being cut into Veneers.

¶ A visit or correspondence from discriminating buyers of all varieties of fine Imported and Domestic Cabinet Woods in Lumber and Veneer is solicited.

¶ You will not only find the Willey warehouses well stocked with a superb collection of Circassian, Mahogany, Vermilion, Black Walnut and other fancy foreign and domestic lumber and veneers, but buyers are assured of prompt and painstaking service, and a quality of product not usually obtainable.

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been regular throughout the state until the last few weeks, during which time some parts of the state have become somewhat dry, but no part of the state has suffered a drouth.

As a result of the bumper crops which are promised, the lumber market this fall will be good and the general good business which has prevailed throughout the state this year will continue. There are some conditions which indicate that the market will be on the upward incline a little later, chief among which are the badly broken condition of stocks in general at the mills and the inevitable car shortage.

ST. LOUIS

There has been no material change in the local hardwood market for the past couple of weeks. Prices are holding up on all items most in demand and especially on those where quick shipment is desired. Plain sawed white oak is one of the items most in demand. There has also been a noticeable improvement in the demand for quartered red oak. Ash and choice gum are having a fairly good movement. Cottonwood in upper grades is also a good seller and the lower grades of the same are selling better than formerly. Stocks in the hands of St. Louis distributors are of good proportions and ample enough for all requirements. Any reasonable demand made on this market can be taken care of promptly. Additional stocks are being received all the time. The future condition of the market is most promising.

MILWAUKEE

Steady improvement seems to be taking place in the local hardwood market and lumbermen are confident that the usual fall revival is now fairly launched. Buyers in all lines are beginning to take more interest and inquiries and actual orders are increasing. There seems to be no denying the fact that stocks of hardwood at most of the consuming plants are low and it would seem that demand ought to be good from now on. The sash and door and interior finishing plants are beginning to place larger orders, in preparation for the fall building season. Building activity in Milwaukee and surrounding towns is increasing each week and the outlook is good for still better things ahead. The furniture manufacturing concerns are taking a little more interest in the market and are placing some good orders. The box manufacturers are all busy and are picking up all the low-grade hardwood which they can get. The farm implement plants in Milwaukee, in Janesville, Racine, Beaver Dam, Horicon and other points about the state are busy once more and are looking for hardwood.

Hardwood prices are being well maintained and buyers have just about come to the conclusion that no price concessions can be expected from now on. Some of the large consumers have been looking for price reductions for some time, but in view of the present situation and the brilliant outlook, wholesalers are inclined to stand by the present quotations. Many lumbermen say that advances are to be expected, just as soon as the fall building campaign is farther along.

Birch, basswood and maple are still the leaders among the northern hardwoods. Demand for maple flooring is unusually brisk. Both plain and quartered oak, ash and chestnut are showing more activity. One of the most favorable signs is the fact that despite the increased demand, most of the buying from the consuming trade is for immediate use. Wholesalers say that plenty of activity may be expected just as soon as buyers begin placing large orders for future shipment.

LIVERPOOL

Business has been extremely quiet during the past month, which is largely explained by the fact that August is a big holiday month throughout the industrial North upon which Liverpool markets so largely depend. Shipments have been extraordinarily heavy, each succeeding ship having brought very full cargoes. The explanation given for this is that sea freights are advancing on Sept. 1. This is a factor which will make business exceedingly difficult as this port cannot stand any advanced prices. In fact it is doubtful if any orders would be placed at the present moment with any talk of advanced prices at any rate until the present stock is cleared away.

Round hickory logs are a trifle better with a diminished import, but the market wants a rest and will not improve to any extent until the present stock is automatically reduced. Round ash has been imported rather freely and the stock is fairly heavy. The market for ash planks has also been rather overdone and no shipments should be made without definite orders. There is a nice steady trade moving in the ash business and there are always buyers for the best qualities. Good prices will also be paid for the best stocks but heavy shipments on consignment would very probably spoil the market. Four-inch ash is wanted badly, while inch-and-a-half is also rather scarce and good orders could be obtained for these if stocks were offered. The cheaper hardwoods are all rather sick owing to the severe glut of stock, sap gum and tupelo being very heavily imported. Wagon oak planks are perhaps a trifle better, thanks to a lessened importation, but this interesting market is not in a good frame of mind and they want a rest from any shipments for some little time. Birch is a fairly good spot, as is also mahogany. The recent sales of the latter wood brought very good prices and everything points to a steady advance in values. There can be no doubt that it will be some time before the supply of mahogany is able to overtake the existing demand.

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WANTED SALESMAN

calling on Hardwood, Veneer and Woodworking plants to carry profitable side line on commission. State lines you carry. Address "BOX 91," care HARDWOOD RECORD.

WANTED.

Competent Hardwood Lumber Inspectors. Those experienced in Mahogany preferred. State experience. OTIS MFG. CO., New Orleans, La.

EMPLOYMENT WANTED

WANTED—EMPLOYMENT

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BUSINESS MANAGER

wants larger opportunities. Fifteen years' experience in factory, office and selling. Up on modern factory methods, cost and accounting systems, and gets results from employes. Now manager for woodworking plant; does buying of all material; has traveled from coast to coast and sold our products to largest buyers. Competent to hold an important position and help make things go. Working interest preferred. Age 35. References from past and present employers. Address "BOX 92," care HARDWOOD RECORD.

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WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.

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WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
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WANTED TO BUY

About 50 cars No. 1 Oak Wagon Tongues and Reaches. Quote price and quantity you can supply. Prices F. O. B. Winnipeg, Man., Canada.

Box 95, Hardwood Record

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TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references

THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

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BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list showing the annual requirements in lumber dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you Write us for further information about our "Selling Lumber by Mail System."

HARDWOOD RECORD, Ellsworth Bldg., Chicago

LUMBER WANTED

WANTED OUTPUT

of the Hardwood Mills operating in West Virginia, also Tennessee and Arkansas; also Cypress and Gum. Address "BOX 90," care HARDWOOD RECORD.

WANTED

100,000 feet 4/4 sound wormy Chestnut.
S. BURKHOLDER LBR. CO., Crawfordsville, Ind.

LUMBER WANTED

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2 cars S/4 sound wormy & 2 Com. Chestnut.
1 car 4/4 sound wormy & 2 Com. Chestnut
1 car 6/4 No. 2 Common Poplar
3 cars 4/4 Box White Pine.
Shipper to invoice direct. Name prices on any stock you desire to move.

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DIMENSION STOCK WANTED

WANTED

DIMENSION OAK

Plain and Quartered

Various sizes for chair and table factories.

Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,

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Hard Maple and Beech Squares 42", 44", 48" long, plump 1" x 1". Must be clear and straight. If you have any to offer write us. Will take them dry or green.

THE COLUMBIA MFG. CO.,
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WANTED—LARGE QUANTITIES

1¼x2x38—40.
1½x2x38—40.
1½x1½x36.
1¼x1¼x40.
1¼x4—20. Oak, Ash or Hickory.

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WANTED—LARGE QUANTITIES

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1¾x1¾x19.
1x2¼x16.
1x3x16.

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TIMBER LANDS FOR SALE

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracts of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.

Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

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DIMENSION RED OAK FOR SALE

1 car switch ties 7x9x12'.
3 cars 4/4 plain lumber.
3 cars small dimension 2x2x18" and up.
2 cars cull wagon poles 2x4x4x12'.
1 car cull 2x4 reaches.

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EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

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to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on waterproof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.

Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns. HARDWOOD RECORD,

537 So. Dearborn St., Chicago.

MACHINERY FOR SALE

AT MOUND CITY, ILL.

One complete circular mill with edger, trimmer, live rolls, portable boilers and engine.

THE WISCONSIN SEATING CO.,
New London, Wis.

FOR SALE

1 No. 46 Berlin Twin Matcher and double Surfacer, 30"x6".
1 No. 114 Berlin Inside Moulder and Matcher, 15"x6".
1 H. B. Smith 8" Moulder or door sticker.
Will be sold cheap for cash, for immediate shipment.
For further particulars inquire of
YELLOW POPLAR LUMBER CO., Coal Grove, O

FOR SALE

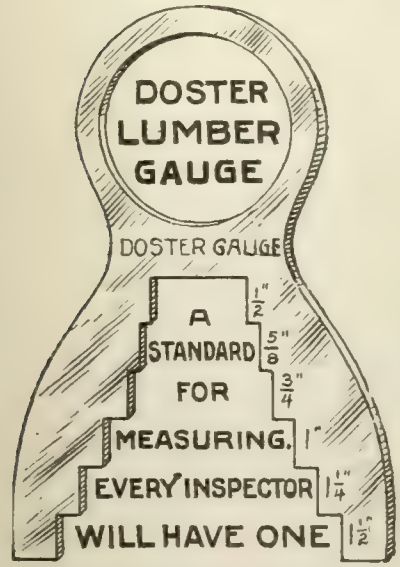
Woodworking Machine Tools. Apply
HARLAN & HOLLINGSWORTH CORPORATION, Wilmington, Del.

HOISTS AND DERRICK IRONS.

for handling logs at mill.
THE NEW ALBANY MFG. CO., New Albany, Ind

VENEER MILLS FOR SALE CHEAP

100" Coe Lathe, Clipper & Knife Grinder
Late model, Coe Roller Dryer.
12'x100' four pair rolls.
Sawmill 60" saw for Cores and Lumber
Steam Log Hoist Derrick
Complete Power Plant.
All in A No. 1 condition. Address
SETTER BROS. CO., Cattaraugus, N. Y.



For sale by HARDWOOD RECORD,
537 S. Dearborn St., Chicago, Ill.
50 CENTS EACH.

MISCELLANEOUS

The HARDWOOD RECORD is a different kind, and altogether better lumber newspaper than has hitherto been published. This is made possible by the loyal co-operation and support of the hardwood element of the lumber industry. If you are a subscriber you will agree.

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you

CHICAGO

E. H. KLANN LUMBER CO.

Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

819 FISHER BLDG. HAR. 1187

Osgood & Richardson

935 Peoples Gas Bldg.

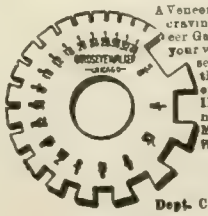
NORTHERN AND SOUTHERN HARDWOODS

Chicago Agents: LAMB-I ISH LUMBER CO.

Factory Lumber

GRAY'S HARBOR SPRUCE
SOFT YELLOW FIR
WESTERN SOFT PINE
DIRECT MILL REPRESENTATION

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Dept. C WALKER BIRD'S EYE

CHICAGO

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are frequent except where our

Two Piece Geometrical Barter Coin

is in use, then imitation isn't possible. Sample if you ask for it.

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We also make Time Checks, Stencils and Log Hammers.



Gerlach Modern Machines

Produce the Cheapest and Best

COOPERAGE STOCK and BOX SHOOKS

Circular, Band and Cylinder Saws
SAW AND LOG TOOLS

THE PETER GERLACH CO., Cleveland, 6th City, U.S.A.

¶ The Gibson Aluminum Tally Book Cover and Tally Tickets are now employed by more than 2,000 lumber manufacturers, dealers and consumers.

GIBSON TALLY BOOK



This three-throw tally ticket cover is made from aluminum, and accommodates four tally tickets—4¼x8¼ inches in size.

Folds compactly to less than one-fourth inch in thickness and fits side or inside coat pocket.

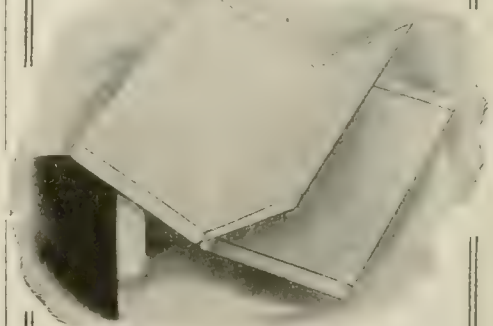
Gives large area of four tickets for complicated tallies, or straight grade can be made on one page.

Accommodates any form of tally ticket desired.

Special, patented, triplicate tally tickets supplied, printed on waterproof paper with carbon backs. Tallies made on these tickets are unalterable. Their use enables the inspector to retain triplicate, and forward original and duplicate. Duplicate designed to be attached to invoice.

These tally books are perfection for durability, convenience, accuracy, and for systematizing the inspection and measurement of lumber

Patent applied for on covers. Copyrighted, 1910. Triplicate Tally Tickets patented.



PRICE LIST

Aluminum Tally Covers, each - -	$ 1.00
Aluminum Tally Covers, per dozen - -	10.00
Patented triplicate Tally Tickets (stock form) per 1,000	10.00
Single sheet manila (stock form) Tally Tickets, per 1,000	4.00

Specimen forms of Tally Tickets mailed on application. Covers sold on approval to responsible concerns.

Manufactured by

Hardwood Record

537 S. Dearborn St., CHICAGO

American Forest Trees

By Henry H. Gibson Edited by Hu Maxwell

"AMERICAN FOREST TREES" is a comprehensive work of more than seven hundred pages, illustrated by more than one hundred full page pictures of forest types of tree growth, and hundreds of minor pictures.

It answers every question worth asking about the infinite variety of forest growth in this country, and the utilization of these woods in lumber and other forms. The opinion of an expert on this work is:

"AMERICAN FOREST TREES" is the foremost contribution that has ever been made to American forest and lumber literature.

The price of this work is Six Dollars ($6.00) net. It will be sent on receipt of price, prepaid, subject to return and refund of payment if it does not prove satisfactory.

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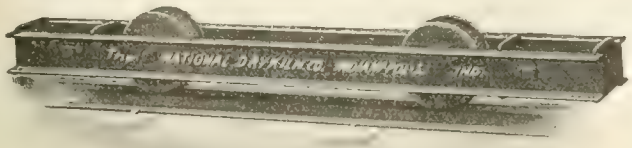
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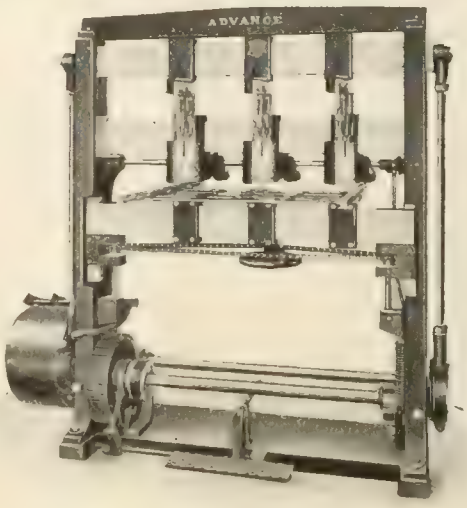


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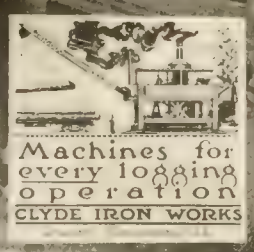
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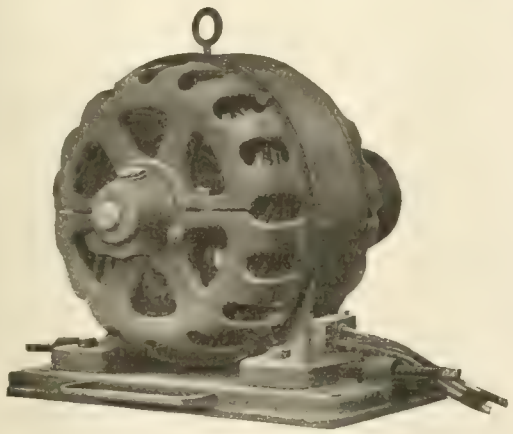
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Such reliability is the result of long experience in design, thorough study of operating conditions, and great care in manufacture. These factors combine to make Westinghouse motors more reliable than the service conditions, for which they are intended, require.

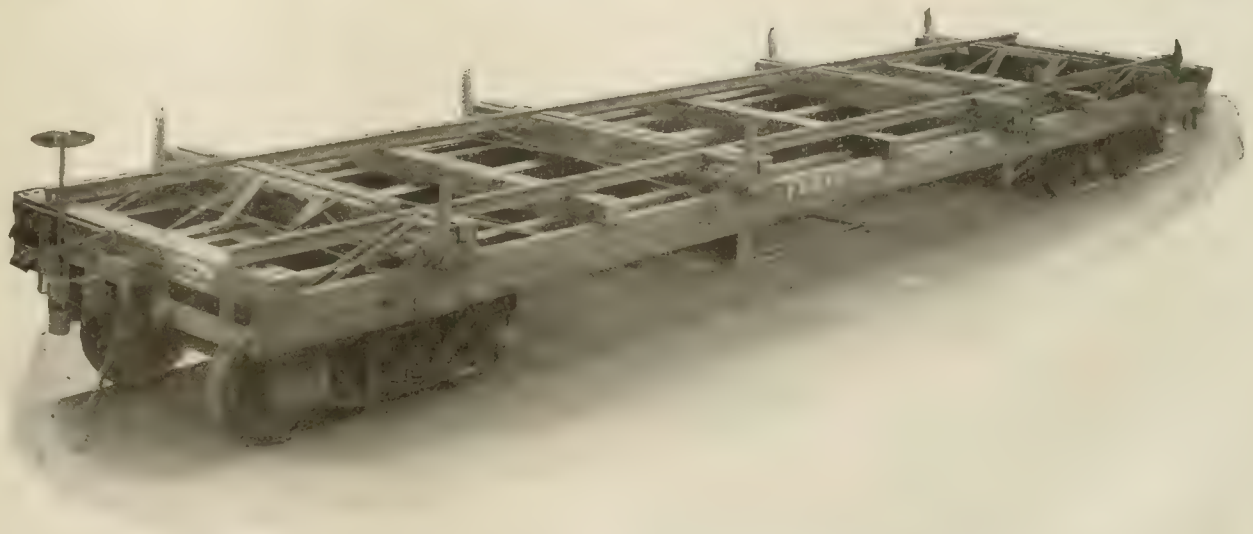
Of course, like any other machines, these motors must be properly installed. Westinghouse service takes care of this detail by giving full information on the installation of Westinghouse motors in any plant.

To receive full assurance of motor reliability, specify "Westinghouse Motors."

Westinghouse Electric & Mfg. Co., East Pittsburg, Pa.

Sales Offices in all Large Cities.

RUSSEL LOGGING CARS



70,000 LBS. CAPACITY SKELETON TYPE RUSSEL CAR, EQUIPPED WITH LOADER RAILS AND RUSSEL PATENT DROP STAKES. THIS CAR COMPLIES WITH M. C. B. RULES AND SAFETY APPLIANCE ACTS

Years of Hard Service Have Demonstrated Russel Cars to be Superior in Quality and Construction. Built for any Capacity Desired

RUSSEL WHEEL AND FOUNDRY CO. **DETROIT, MICHIGAN**

VENEERS AND PANELS

Ahnapee Veneer & Seating Co.

HOME OFFICE, FACTORY AND VENEER MILL, ALGOMA, WIS.
VENEER AND SAWMILL, BIRCHWOOD, WIS.

We manufacture at our Birchwood plant single ply veneers of all native northern woods and deliver stock that is in shape to glue.

From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

"SOVEMANCO."

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard. LOUISVILLE, KY. Mills, Magnolia, Standard and 21st Sts.

Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co. *Wausau, Wis.*

Custom Mill Work, Storage, Inspection

ON

Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co. Long Island City, New York

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OUR SPECIALTY
Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.
ROACHDALE, IND.
H. I. CUTSINGER, Gen'l Mgr.

B. C. JARRELL & CO.
MANUFACTURERS OF
High Grade, Rotary-Cut Gum
VENEERS
Cut right; dried right; prices right
HUMBOLDT, - TENNESSEE

Memphis Veneer & Lumber Co.
Memphis, Tenn.
Mahogany Veneer
1-8, 3-16 and 1-4-in. door stock.
1-20 and 1-16-in. sawed mahogany.

Sawed Veneer in the following
Quartered White Oak,
Quartered Red Oak,
Plain Red Oak,
Yellow Poplar,
White Ash and
Quartered Red Gum

Memphis Veneer & Lumber Company
Memphis, Tennessee

CIRCASSIAN MAHOGANY
Logs VENEERS Lumber
WE IMPORT WE MANUFACTURE
All Thicknesses of Mahogany
Ready for Shipment
RICE VENEER & LUMBER CO.
GRAND RAPIDS, MICH.

Hoffman Brothers Company
Sliced and Sawed, Quartered and Plain Red and White Oak
Walnut Cherry Ash Maple
Let us Send You Our Stock List FORT WAYNE, IND.

The Central Veneer Co.
SOFT YELLOW POPLAR
CROSS BANDING
Huntington, West Virginia

WISCONSIN

WHERE THE FINEST NORTHERN HARDWOODS GROW

Scott & Howe Lumber Co.

Medford Lumber Co.

NELS DUEHOLM, Sales Manager

Old National Bank Building

OSHKOSH, WISCONSIN

Send us your inquiries for dry Birch and Maple. We carry one of the largest and best manufactured stocks in the Northwest.

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BASSWOOD

DRY STOCK

Ready for Shipment

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2″ No. 1 Common & Better

BIRCH
1″ No. 1 Common & Better
1¼″ No. 1 Common & Better
1½″ No. 1 Common & Better

BASSWOOD
1″ No. 1 Common
1¼″ No. 1 Common

Brown Bros. Lumber Co.
Rhinelander, Wis.

Birch Is Our Specialty

All Grades, All Thicknesses

Basswood
Maple
Elm

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Tomahawk
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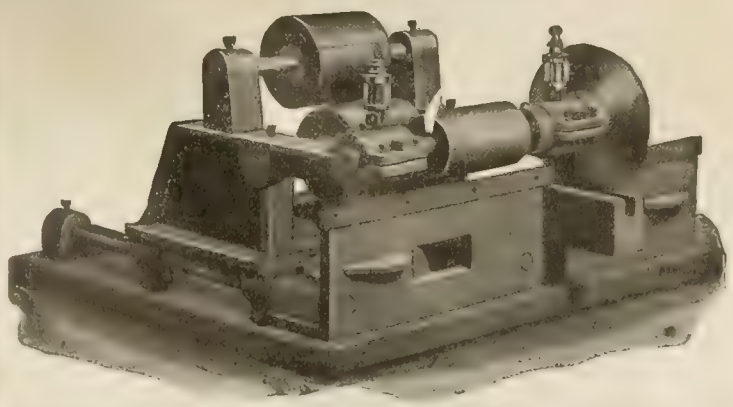
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Dimension Stock cut to your sizes in 1/20 Sliced Quartered Oak and Mahogany

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We also manufacture a full line of high-grade, rotary-cut veneers, making a specialty of exceptionally fine poplar.

ADAMS & RAYMOND VENEER COMPANY
Established 1869 Indianapolis, Ind.



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Flooring Factories

For cutting out defects and making square and smooth ends for end-matching machines. Used by the largest producers. Write for particulars and prices.

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MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

"Ideal" Steel Burnished Rock Maple Flooring

is the flooring that is manufactured expressly to supply the demand for the best. It is made by modern machinery from carefully-selected stock and every precaution is taken throughout our entire system to make it fulfill in every particular its name—"IDEAL."

ROUGH OR FINISHED LUMBER—ALL KINDS

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The I. Stephenson Company - WELLS, MICHIGAN

For the Better Kind of Hardwoods

write

EAST JORDAN LUMBER CO.

East Jordan, Mich.

ALL THE MICHIGAN HARDWOODS

Makers of

LATH SHINGLES — **Imperial Brand** MAPLE FLOORING — PINE AND HEMLOCK

FORMAN'S FAMOUS OAK FLOORING

Is made in faultless fashion from the most uniform-colored and even-textured oak produced; worked from Kraetzer-Cured lumber manufactured at our Heidelberg, Ky., sawmills.

Thomas Forman Company

Detroit : : : : : Michigan

Von Platen Lumber Co.

Iron Mountain, Michigan

MANUFACTURERS OF

BIRCH BASSWOOD ELM MAPLE

500 M feet 8/4 No. 2 Com. and Better Dry Maple
400 M feet 6/4 No. 2 Com. and Better Dry Maple
300 M feet 5/4 No. 2 Com. and Better Dry Maple

We Solicit Your Inquiries

SHIPMENTS VIA C. & N. W.—C., M. & ST. P.—W. & M.

"Chief Brand" Maple and Beech Flooring

in 3/8, 5/8 and 13-16 and 1 1-16 inch Maple in all standard widths and grades, will commend itself to you and your trade on its merits alone

WRITE US, WE CAN INTEREST YOU

Kerry & Hanson Flooring Co.

GRAYLING MICHIGAN

S. L. EASTMAN FLOORING CO.

SAGINAW BRAND

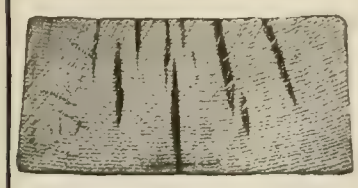
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For Prompt Shipment

Basswood—100,000 ft. 5/4 No. 2 Common & Better.
Soft Maple—25,000 ft. 4/4 & 8/4 Log Run M. C. O.
White & Red Oak—12,000 ft. Log Run M. C. O.
Black Walnut—3,000 ft. Log Run M. C. O.

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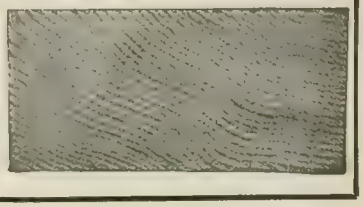


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Eureka OAK AND BEECH **Oak Flooring**

Complete stock of 3/8" and 13/16" in all standard widths

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Mills: Pensacola, N. C. *Capacity* 90,000 ft. per day

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A GUARANTEE OF PERFECTION

Our Corps of Inspectors

Intelligent! Highly Trained!

Conscientious!

Is assurance that you will get what your order calls for when you buy Gum from us.

Himmelberger-Harrison Lumber Company

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Band Sawn Southern Hardwoods

SPECIALTIES

RED GUM, PLAIN OAK

SEND US YOUR INQUIRIES

GARETSON-GREASON LUMBER CO.
1002-1005 Times Bldg. ST. LOUIS

MANUFACTURERS

Three Mills

WE HAVE IT

W. W. DEMPSEY
Manufacturer and Wholesaler of

HARDWOODS

Hard Maple 40,000 ft. 4/4 No. 2 Com.

Soft Maple 40,000 ft. 4/4 Log Run.

Tupelo Gum or Bay Poplar 100,000 feet 4/4 Log Run.

Cypress 100,000 feet 4/4 No. 1 Common. 200,000 feet 4/4 No. 2 Common.

Spruce 100,000 feet 8/4 Select. 180,000 feet 8/4 Box.

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A LINE BRINGS PRICE BY RETURN MAIL

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The Foremost Hardwood Market of the East

BUFFALO HARDWOOD LUMBER CO.
We want to buy for cash
OAK, ASH AND OTHER HARDWOODS
All grades and thicknesses.
Will receive and inspect stock at shipping point.
Branch yard, Memphis, Tenn.
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OUR SPECIALTY
QUARTERED WHITE OAK
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SPECIALTIES:
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SPECIALTIES
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HARDWOODS OF ALL KINDS
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Specialties
Cherry and Oak
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G. ELIAS & BRO.
HARDWOODS
White Pine, Yellow Pine, Spruce, Hemlock, Fir, Lumber, Timber, Millwork, Boxes, Maple and Oak Flooring
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The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant, Kitchen & Company

Manufacturers Old-Fashioned Soft Yellow Poplar

5-8 and 4-4 in Wide Stock, Specialty

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
661 W. 115th Street, New York City

FOR DISCRIMINATING BUYERS wanting a Clear Board for first class shelving and other similar purposes there is nothing that will surpass our CLEAR HEMLOCK. It is bright in appearance, light in weight and is odorless and durable. We make it in 6", 8", 10" and 12" widths, as also 13" to 20" wide. In addition to this, we have all other grades in Hemlock Boards. Also you should try the soft quality of our Smoky Mountain Chestnut. In No. 1 Common and Better grades we can supply it 60', 14' and 16' lengths. The widths are most desirable and the manufacture perfect. Also we have a nice assortment of 5/8" Panel Poplar 28" to 36" and 36" to 44" wide or can be assorted in widths as may be desired. This is the genuine soft yellow Smoky Mountain Poplar. Also do not forget we are in position at all times to cut to order high grade Poplar, Ash and Maple.

WE SOLICIT THE BUSINESS OF DISCRIMINATING BUYERS FOR ALL HIGH GRADE SMOKY MOUNTAIN HARDWOODS AND HEMLOCK

LITTLE RIVER LUMBER COMPANY Townsend, Tenn.

W. H. White Company
Boyne City Lumber Company

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STOCK DRY—STANDARD GRADES—BEST MANUFACTURE—CAR OR CARGO SHIPMENTS

WE OFFER
All Kinds
OF
Hardwood and Hemlock
Lumber
Hardwood
Flooring, Lath
AND
Dimension Stock

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED
POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT.
BASSWOOD

White Oak Flooring

SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

LUMBER CO.

Hardwood Record

Eighteenth Year, Semi-Monthly.

CHICAGO, SEPTEMBER 25, 1913

Subscription $2. Single Copies, 10 Cents.



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Gentlemen:

We sell Lumber, especially Hardwoods.

We manufacture almost all we sell—we are first hands.

Our delivery points are scattered and prompt shipments our aim. Get in touch. We'll do you good.

J. Gibson McIlvain & Co.
1420 Chestnut Street, Philadelphia

For Quick Shipment

5 cars 4/4" 1s & 2s Q. W. O.
3 cars 4/4" No. 1 Com. Q. W. O.
3 cars 4/4" Clear Q. W. O. Strips, 4 to 5½".
1 car 4/4" Clear Q. W. O. Strips, 2½ to 3½".
½ car 4/4" Clear Q. W. O. Strips, 1½ to 2".
4 cars 4/4" 1s & 2s Plain W. O.
3 cars 4/4" No. 1 Com. Plain W. O.
4 cars 4/4" Com. & Bet. Q. R. O.
2 cars 4/4" 1s & 2s Plain R. O.
7 cars 4/4" No. 1 Com. Plain R. O.
2 cars 4/4" No. 2 Com. Plain R. O.
2 cars 5/4" 1s & 2s Plain R. O.
1 car 5/4" No. 1 Com. Plain R. O.
4 cars 3/4" 1s & 2s Plain R. O.
5 cars 4/4" 1s & 2s Plain Red Gum.
7 cars 4/4" No. 1 Com. Plain Red Gum.
3 cars 4/4" 1s & 2s Qtd. Red Gum.
1 car 4/4" No. 1 Com. Qtd. Red Gum.
2 cars 5/4" 1s & 2s Qtd. Red Gum.
1 car 5/8" 1s & 2s Plain Red Gum.
4 cars 4/4" 1s & 2s Sap Gum.
3 cars 3/4" 1s & 2s Sap Gum.
3 cars 4/4" 1s & 2s Cottonwood, 6" to 18".
1 car 4/4" 1s & 2s Cottonwood, 13" and up.
8 cars 4/4" Cottonwood Box Boards, 13 to 17".
2 cars 4/4" Cottonwood Box Boards, 9 to 12".
2 cars 4/4" Cottonwood Box Boards, 9 to 10".
7 cars 4/4" No. 1 Com. Cottonwood.

Immediate Attention to All Inquiries

Memphis Band Mill Company
Memphis, Tenn.

Cartier-Holland Lumber Company

"A Real Opportunity"

Just look over the following items of Specially Manufactured Furniture Stock, Band Sawed, Perfectly Edged and Trimmed:

80,000' 4/4 End Cured Winter Sawn White Maple
5,000' 5/4 End Cured Winter Sawn White Maple
5,000' 6/4 End Cured Winter Sawn White Maple
10,000' 8/4 End Cured Winter Sawn White Maple
40,000' 5/4 Selected No. 1 & Better Birch
250,000' 1x4 & Wider Pine Crating (85% 6" & over)

A Postal Card Will Bring Prices That Will Warrant Your Orders

Ludington
Michigan

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

BASSWOOD

We Offer for Prompt Shipment

1 x 4 Clear Strips	150 M
1 x 6 1's and 2's	200 M
1 x 7 and 8″ 1's and 2's	34 M
1 x 3 No. 1 Common	25 M
1 x 4 No. 1 Common	50 M
1 x 5 No. 1 Common	32 M
1 x6 No. 1 Common	148 M
1 x7 and up No. 1 Common	26 M
4/4 No. 1 Common	65 M

Sept. 7, 1913

COBBS & MITCHELL, Inc.

Sales Department

CADILLAC MICH.

Mitchell Brothers Co.

Dry Stock List

MICHIGAN HARDWOODS

Cadillac, Mich. Sept. 7, 1913

1x7 & 8 Basswood, 1s & 2s	30 M
1x4 Basswood, Clear	13 M
1x4 Basswood, No. 1 Common	11 M
1x6 Basswood, No. 1 Common (part dry)	19 M
4/4 Birch, 1s & 2s (part dry)	17 M
4/4 Birch, No. 3 Common (part dry)	33 M
4/4 Cadillac Gray Elm 1s & 2s	96 M
4/4 Cadillac Gray Elm, No. 1 Common	100 M
4/4 Cadillac Gray Elm, No. 2 Common	81 M
4/4 Cadillac Gray Elm, No. 3 Common	28 M
4/4 Rock Elm, No. 2 Common & Better	7 M
4/4 Soft Maple No. 2 Com. & Bet. (part dry)	18 M
4/4 Soft Maple, No. 3 Com	4 M
4/4 White Maple, end dried (clear)	14 M
4/4 Birdseye Maple 1s & 2s, end dried	1½ M

CADILLAC QUALITY

When you want lumber of Cadillac Quality, Lumber which has been manufactured and seasoned properly, and grades which have not been blended to meet price competition—send us your inquiries.

WE SELL ONLY MITCHELL'S MAKE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

30,000 ft. 6/4 No. 1 C. & B. Basswood
50,000 ft. 5/4 1st & 2nds Basswood.
75,000 ft. 5/4 No. 2 C. & B. Birch
20,000 ft. 6/4 No. 2 C. & B. Birch
100,000 ft. 6/4 No. 2 C. & B. Beech
40,000 ft. 8/4 No. 2 C. & B. Beech

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.



Ready for Shipment

Ten cars
4/4 No. 1 Common & Better Birch

Five cars
6/4 No. 1 Common & Better Birch

Two cars
8/4 No. 1 Common & Better Birch

Two cars
4/4 No. 2 Common & Better Ash

Three cars
4/4 No. 1 Common & Better Soft Elm

Five cars
4/4 No. 2 Com. & Better Basswood

Above cut from virgin timber. Grade and manufacture are first class.

Mears - Slayton Lumber Co.
1237 Belmont Ave. Chicago, Ill.

15,000,000 Feet Always On Hand



Our Double Band Mill
Huttig, Ark.

With two mills like this we manufacture 40,000,000 feet of band sawn southern hardwoods annually. We guarantee our lumber to be of excellent widths, full thickness, and to contain 50% to 75% of 14' and 16' lengths. We make high grades and all of the "CREAM" is in each grade. Send us your inquiries.

"Wislumbco Standards"

25,000	"	8/4 Log Run Hickory
30,000	"	4/4 x 13" & Wider 1st & 2nd Tupelo
40,000	"	4/4 No. 1 Common Red Gum
50,000	ft.	4/4 1st & 2nd Red Gum
50,000	"	4/4 x 13 to 17" Box Board Sap Gum
50,000	"	4/4 x 13" & Wider 1st & 2nd Sap Gum
50,000	"	6/4 Log Run Soft Maple
60,000	"	4/4 No. 1 Common Cypress
60,000	"	4/4 No. 2 Common Sap Gum
65,000	"	4/4 x 6 to 12" 1st & 2nd Tupelo
75,000	"	4/4 x 13 to 17" Box Board Tupelo
75,000	"	4/4 x 6 to 12" 1st & 2nd Sap Gum
75,000	"	4/4 No. 1 Common Sap Gum
75,000	"	4/4 Shop Cypress
100,000	Pcs.	1¼x1¼ 19" Oak Squares

A good stock of Oak, Gum, Cypress, Cottonwood, Elm and Maple

Wisconsin Lumber Co.
CHICAGO

MILLS
Huttig, Ark.
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It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the **United States, Alberta, Manitoba and Saskatchewan.** The trade recognizes this book as the authority on the lines it covers.

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THE GREATEST HARDWOOD MARKET IN THE WORLD

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VENEERED PANELS
ALL WOODS
SEND FOR STOCK LIST
MAHOGANY LUMBER
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CHICAGO

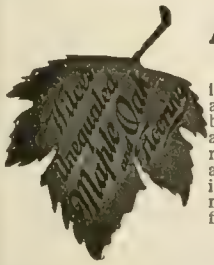
$100,000.00 to Invest

If you had $100,000.00 given you to invest on condition that the investment be *absolutely safe* and pay a fair rate of interest and an assured large final profit—what would you buy?

Timber land values have never declined. Panics and politics have no effect on timber. It is always growing without cultivation.

We own desirable tracts, both large and small, in the North, South and West. Write us for prices and details.

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Timber Lands Exclusively
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A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

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MANUFACTURERS AND DEALERS IN
Maple, Birch, Elm, Basswood, Ash
And Other Northern Hardwoods
In the Market for Round Lots of Hardwood
WRITE US BEFORE SELLING
Fisher Building, - - - CHICAGO
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WRITES ONE ADVERTISER
This Means That He Is Getting
NEW BUSINESS
Through His Ad
If we can do it for him is there any logical reason why we can't for you?
MAKE US PROVE IT
HARDWOOD RECORD, CHICAGO

Birch Is Our Specialty
All Grades, All Thicknesses
Basswood
Maple
Elm
Oelhafen Lbr. Co.
Tomahawk
Wis.

Scott & Howe Lumber Co. **Medford Lumber Co.**
NELS DUEHOLM, Sales Manager
Old National Bank Building OSHKOSH, WISCONSIN

WE HAVE THE FOLLOWING DRY HARDWOOD IN SHIPPING CONDITION

50 cars 4/4 1sts & 2nds Birch
55 cars 4/4 No. 1 Com. Birch
20 cars 4/4 No. 2 Com. Birch
25 cars 4/4 No. 3 Com. Birch
15 cars 4/4 1sts & 2nds Hard Maple
40 cars 4/4 No. 1 Com. Hard Maple
35 cars 4/4 No. 2 Com. Hard Maple
20 cars 4/4 No. 3 Com. Hard Maple
18 cars 8/4 No. 1 C & B Hard Maple
6 cars 6/4 No. 1 C & B Hard Maple
20 cars 4/4 No. 1 Com. Basswood
15 cars 4/4 No. 2 Com. Basswood
4 cars 5/4 No. 1 C & B Basswood

Also several other items in thick lumber for mixed cars. Send us your inquiries

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO.

KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK

OUR SPECIALTY

MANUFACTURERS OF

QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER

BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER, Pres. — J. M. LOGAN, Gen'l Manager

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J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS

HARDWOODS AND PINE

POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:
Bank and McLean Ave., Cincinnati — I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:

WHITE OAK—Plain or Quartered.
RED OAK—Plain or Quartered.
CHESTNUT — BASSWOOD
POPLAR — WHITE PINE

Always carry large well assorted stock of all kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR, OAK, CHESTNUT, WHITE AND YELLOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

Kimball & Kopcke

Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

"THE VERY BEST"

ASH, BUCKEYE,
RED BIRCH, CHESTNUT, GUM,
RED OAK, WHITE OAK, PINE,
POPLAR and WALNUT

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, **Knoxville, Tenn.**

CINCINNATI
THE GATEWAY OF THE SOUTH

The Maley, Thompson & Moffett Co.

Veneers, Mahogany and Hardwood Lumber

Largest Stocks Best Selections

CINCINNATI, OHIO

L. W. RADINA & CO.

DEALERS IN

POPLAR AND HARDWOODS

CINCINNATI : : OHIO

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The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Grade West Virginia and Southern Hardwoods in stock at all times.

Shipments made direct from our own yards and mills in straight or mixed cars.

SEND US YOUR INQUIRIES

Lest You Forget
and
You probably don't know that we are now
Manufacturing in White and Red Plain and Quarter-Sawed **OAK**
3/8, 1/2, 5/8, 3/4, 4/4, 5/4 — 100,000 Feet per Day
EXPORT AND DOMESTIC

BENNETT & WITTE
MEMPHIS, TENN.
NEW ORLEANS, LA. CINCINNATI, O.
CABLE ADDRESS, ALL OFFICES, "BENNETT"

Do You Use Poplar?

If you do, you want stock that is soft in texture and easily worked. WE HAVE IT.

Let our representative tell you about our stock or send us your inquiries and let us QUOTE YOU.

The Mowbray & Robinson Co., Cincinnati Ohio
MANUFACTURERS OF
PLAIN AND QUARTER-SAWN OAK AND POPLAR

MILLS	MAIN OFFICE	YARDS
Quicksand, Ky.	CINCINNATI, OHIO	Cincinnati, O.
Viper, Ky.		Detroit, Mich.
West Irvine, Ky.		Rochester, N. Y.
		Brooklyn, N. Y.

If you want to reach the wholesale consumers of hardwood lumber throughout the United States, a HARDWOOD RECORD advertisement will do it for you.

If you want to reach the hardwood manufacturers of the United States, a HARDWOOD RECORD advertisement will do it for you.

The HARDWOOD RECORD represents high-class, special, class circulation, with a minimum of waste circulation.

Ask any HARDWOOD RECORD advertiser for experience on results.

GOOD GRADES "STEARNS QUALITY LUDINGTON" PROMPT SERVICE

HARDWOOD SPECIALISTS

LAST CALL
for Winter Sawn End Dried White Maple

Only a limited amount of this stock on hand, so cover your present and future requirements before the supply is exhausted.

Lower Peninsula Hard Rock Maple



END DRYING LUMBER SCIENTIFICALLY

Stock on Hand

65 M 4/4 FAS.
36 M 5/4 FAS.
48 M 6/4 FAS.
55 M 8/4 FAS.
83 M 4/4 No. 1 Com.
26 M 5/4 No. 1 Com.
32 M 6/4 No. 1 Com.
35 M 8/4 No. 1 Com.

The STEARNS SALT & LUMBER CO. LUDINGTON, MICH.

LAMB-FISH LUMBER CO.

MEMBER HARDWOOD MANUFACTURERS ASSOCIATION OF THE U.S. — A Guarantee of a Square Deal in both Grade and Measurement

Band Mill and General Offices

CHARLESTON, MISS.

THE LARGEST HARDWOOD MILL IN THE WORLD—ANNUAL CAPACITY 40,000,000

We Produce Kraetzer-cured LUMBER

STOCK LIST—Dry Lumber on Hand September 1st, 1913

	3/8	1/2	5/8	3/4	4/4	5/4	6/4	8/4	10/4	12/4	16/4
FAS Qtd. Wh. Oak	20,000	30,000	18,000	30,000	50,000	8,000	6,000	.....	.....	.....	.....
FAS Qtd. Wh. Oak, 10" & up	.....	.....	.....	.....	16,000	.....	.....	.....	.....	.....	.....
FAS Qtd. Wh. Oak Strips	.....	.....	.....	.....	15,000	.....	.....	.....	.....	.....	.....
No. 1 Com. Qtd. Wh. Oak	.....	12,000	15,000	15,000	160,000	2,000	2,000	.....	.....	.....	.....
No. 1 Com. Qtd. Wh. Oak	.....	.....	.....	.....	15,000	.....	.....	.....	.....	.....	.....
No. 2 Com. Qtd. Wh. Oak	.....	.....	.....	.....	25,000	.....	.....	.....	.....	.....	.....
FAS Pl. Wh. Oak	30,000	30,000	25,000	20,000	200,000	*6,000	*5,000	*5,000	.....	.....	.....
No. 1 Com. Pl. Wh. Oak	20,000	20,000	25,000	30,000	100,000	15,000	20,000	20,000	.....	.....	.....
FAS Pl. Red Oak	.....	.....	30,000	25,000	300,000	40,000	12,000	.....	.....	.....	.....
No. 1 Com. Pl. Red Oak	.....	.....	20,000	18,000	400,000	12,000	12,000	3,000	.....	.....	.....
Oak Core Stock°	.....	.....	.....	.....	200,000	.....	.....	.....	.....	.....	.....
Com. & Btr. Qtd. Red Gum	.....	.....	.....	.....	20,000	13,000	12,500	12,500	.....	.....	.....
FAS Pl. Red Gum	300,000	200,000	200,000	300,000	350,000	200,000	180,000	50,000	12,000	10,000	3,000
No. 1 Com. Pl. Red Gum	80,000	60,000	60,000	100,000	300,000	40,000	20,000	15,000	.....	.....	.....
FAS Highly Fig. Red Gum	25,000	20,000	15,000	20,000	12,000	5,000	4,000	3,000	.....	.....	.....
FAS Sap Gum, 13-17"	.....	.....	5,000	20,000	75,000	6,000	.....	.....	.....	.....	.....
FAS Sap Gum, 13" & Up, Stained	.....	.....	.....	.....	30,000	.....	.....	.....	.....	.....	.....
FAS Sap Gum, 18" & Up	.....	.....	.....	.....	20,000	.....	.....	.....	.....	.....	.....
FAS Sap Gum, 6" & Up	30,000	25,000	20,000	30,000	200,000	20,000	15,000	18,000	12,000	12,000	.....
Sap Gum Box Boards, 13-17"	.....	.....	.....	.....	75,000	.....	.....	.....	.....	.....	.....
Sap Gum Box Boards, 8-12"	.....	.....	.....	.....	25,000	.....	.....	.....	.....	.....	.....
No. 1 Com. Sap Gum, 4" & Up	35,000	30,000	25,000	40,000	50,000	40,000	16,000	.....	.....	.....	.....
No. 2 Com. Sap Gum, 3" & Up	60,000	120,000	60,000	80,000	200,000	40,000	30,000	.....	.....	.....	.....
Shop & Better Cypress	.....	.....	.....	.....	200,000	.....	250,000	.....	.....	.....	.....

*Can be shipped inside of sixty days—balance of stock ready for immediate shipment

° This is a special grade suitable for veneering over. This stock is bone dry and we are in position to make some attractive prices on same.

All of our Red and Sap Gum, No. 1 Common and Better, is Kraetzer-Cured, which is a guarantee that the lumber is properly cured—absolutely straight, free of stain and check; it comes out of this process uniform in color and of a soft, mild texture. We are prepared to kiln-dry any of the above stock and have Planing Mill facilities for dressing. Oak timbers and planking a specialty.

BAND SAWN HARDWOODS

WE PRODUCE OUR OWN STOCKS

Our Specialties:

Cottonwood—Red and Sap Gum | **Oak** Plain and Quartered Red and White | **Three Ply Red Gum Panels**

A Few Items We Want To Move

10 cars 4/4" x 13" to 17" Cottonwood Box Boards.
12 cars 4/4" x 13" to 17" 1sts & 2nds Cottonwood.
7 cars 4/4" x 18" to 21" 1sts & 2nds Cottonwood.
5 cars 5/4" x 6" to 12" 1sts & 2nds Cottonwood.
4 cars 3/8" x 6" & Up 1sts & 2nds Sap Gum.
1 car 1/2" x 6" & Up 1sts & 2nds Sap Gum.
4 cars 5/8" x 6" & Up 1sts & 2nds Sap Gum.
3 cars 3/4" x 6" & Up 1sts & 2nds Sap Gum.
6 cars 4/4" x 6" & Up 1sts & 2nds Sap Gum.
7 cars 4/4" x 13" to 15" 1sts & 2nds Sap Gum.
1 car 5/4" x 6" & Up 1sts & 2nds Sap Gum.
3 cars 6/4" x 6" & Up 1sts & 2nds Sap Gum.
2 cars 3/8" x 6" & Up 1sts & 2nds Red Gum.
2 cars 1/2" x 6" & Up 1sts & 2nds Red Gum.
2 cars 5/8" x 6" & Up 1sts & 2nds Red Gum.
3 cars 3/4" x 6" & Up 1sts & 2nds Red Gum.
7 cars 4/4" x 6" & Up 1sts & 2nds Red Gum.
5 cars 6/4" Log Run Soft Maple.
1 car 5/8" 1sts & 2nds Plain Red Oak.
4 cars 3/4" 1sts & 2nds Plain Red Oak.
5 cars 4/4" 1sts & 2nds Plain Red Oak.
6 cars 5/8" No. 1 Common Plain Red Oak.
3 cars 3/4" No. 1 Common Plain Red Oak.
1 car 4/4" 1sts & 2nds Qtd. White Oak (flooded stock).
1 car 5/4" 1sts & 2nds Red Gum (flooded stock).
2 cars 5/4" No. 1 Common Red Gum (flooded stock).

WRITE US FOR PRICES

ANDERSON-TULLY COMPANY

Memphis — **BOX SHOOKS and VENEERS** — **Tenn.**

NASHVILLE

CELEBRATED FOR HIGHEST TYPE TIMBER GROWTH, FAULTLESS MANUFACTURE AND GOOD GRADES

Farris Hardwood Lumber Co.

Successors to
CHEROKEE LUMBER COMPANY

Manufacturers Hardwood Lumber

NASHVILLE TENNESSEE

SECURE BETTER PRICES

AT LESS SELLING COST BY REACHING MORE CUSTOMERS. HARDWOOD RECORD PUTS YOU BEFORE THEM ALL TWICE A MONTH.

ASK US ABOUT IT

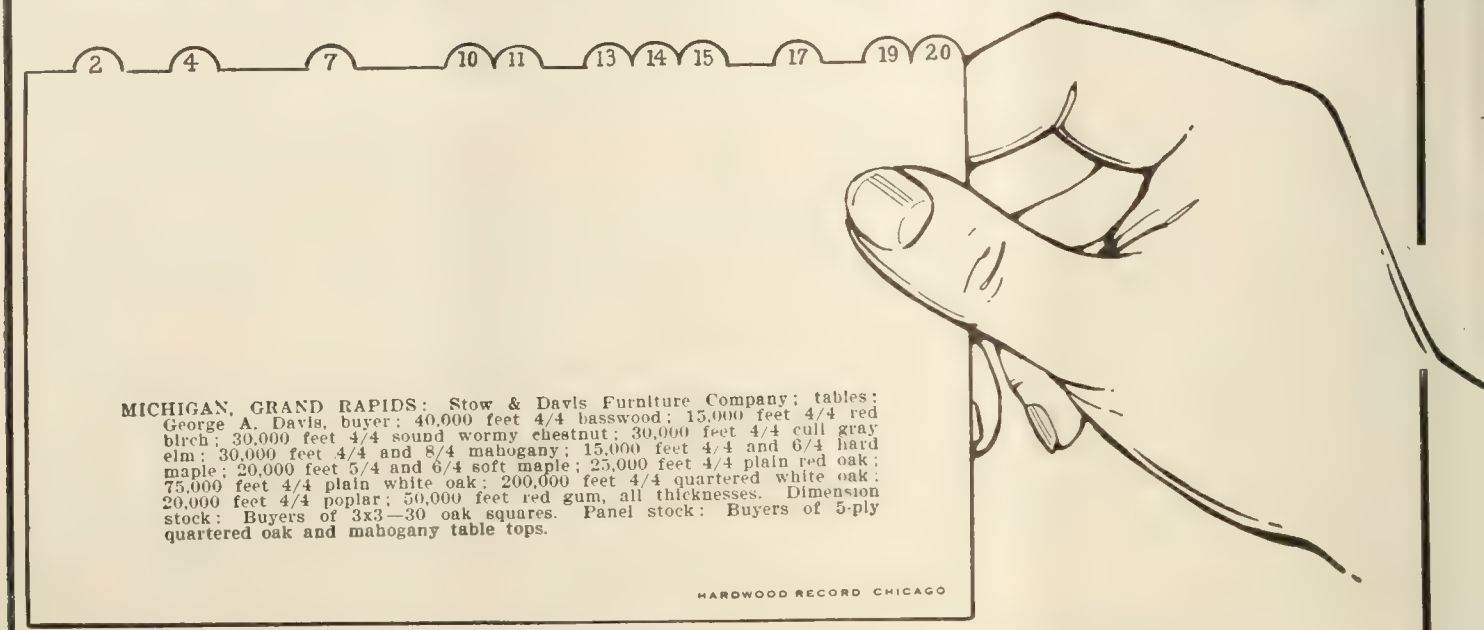
We will name very attractive prices on a few cars of each of the following items:

4/4, 6/4, 10/4 and 12/4 1s and 2s Poplar
4/4 and 8/4 Sap Poplar.
1¼", 1½" and 2½" No. 1 Common Poplar.
4/4 No. 1 and Panel Poplar in widths of 12 to 17", 18 to 23" and 24" and up.
4/4 x 13 to 17" Poplar Box Boards.
4/4 1s & 2s Basswood or Linn—very fine.
3/8, 4/4, 5/4, 10/4 and 12/4 1s & 2s Qtd. W. Oak.
4/4, 5/4, 6/4 and 8/4 No. 1 Common Qtd. W. Oak.
6/4 1s & 2s Qtd. R. Oak.
4/4, 5/4 and 6/4 No. 1 Common Qtd. R. Oak.
6/4 and 10/4 1s & 2s Hickory.
4/4, 6/4, 10/4 and 12/4 No. 1 Common Hickory.
4/4, 6/4, 8/4, 10/4 and 12/4 No. 2 Common Hickory.
4/4 1s & 2s Chestnut, also 5, 6 and 8/4.
4/4 No. 1 Common Chestnut.

John B. Ransom & Co.

MANUFACTURERS OF
Hardwood Lumber
Nashville, Tenn.

Doesn't It Look Good To You?



Specimen of one of the thousands of patented tabbed index cards involved in Hardwood Record's copyrighted Information Service, showing annual requirements for Lumber, Dimension Stock, Veneers and Panels employed by wholesalers and hardwood manufacturing consumers throughout the United States and Canada.



Illustration of Oak Cabinet in which this Information Service is filed.

ILLINOIS

Key

1	Ash	12	Hickory
2	Basswood	13	Mahogany
3	Beech	14	Maple
4	Birch	15	Oak
5	Butternut	16	Walnut
6	Cherry	17	Poplar
7	Chestnut	18	Miscellaneous including Dogwood, Holly, Locust, Persimmon, Sycamore.
8	Cottonwood		
9	Cypress		
10	Elm	19	Dimension stock
11	Gum	20	Veneers and panel stock

Fac-simile of state key card between which the tabbed information cards are filed alphabetically by towns, by means of which instant reference can be made to the buyers of any kind of wood, in any locality in the United States and Canada.

THIS service is comprised in more than fifty bulletins, and additional bulletins of corrections and additions are printed frequently.

This service is kept positively up-to-date, and is indispensable to lumber and veneer sales departments.

It is an exclusive service disposed of only to HARDWOOD RECORD advertisers.

LET US TELL YOU ABOUT THE MODERATE COST

Hardwood Record, 537 South Dearborn Street, Chicago

LOUISVILLE HARDWOOD CLUB

LOUISVILLE HARDWOOD CLUB

If You Want It—Speak Quick!

Here are some lumber items that are particularly desirable, because of the condition of the stock, the prices at which it will be sold and the fact that it can be shipped to almost any consuming point to advantage. Jobbers and factory men who can use one or more of the items mentioned should get in touch with the concerns referred to. Mixed cars of various lots quoted will be made up by two or more firms if desired.

LOUISVILLE POINT LUMBER CO.

Complete stock 5/8" to 4" No. 1 common and better band sawn soft yellow poplar.
8 cars 5/4, 6/4 and 8/4 No. 1 common and better plain red oak.
5 cars 5/4, 6/4 and 8/4 No. 1 common and better plain white oak.
1 car 8/4 No. 2 common plain red oak.
1 car 8/4 No. 2 common plain white oak.
Several cars 6/4, 8/4, and 10/4 No. 1 common befter hickory.
Several cars 4/4 No. 1 common quartered white oak.
1 car 4/4 1sts and 2nds cottonwood, wide stock included, dry.

W. P. BROWN & SONS LUMBER CO.

50,000 feet 4/4 gum boxboards.
3 cars 4/4 1sts and 2nds sap gum.
3 cars 6/4 1sts and 2nds sap gum.
2 cars 4/4 1sts and 2nds plain red gum.
2 cars 4/4 1sts and 2nds quartered red gum.
2 cars 8/4 No. 1 common hickory.
1 car 4/4 common and better buckeye.
1 car 4/4x10" and up 1sts and 2nds quartered white oak.
1 car 4/4x10" and up No. 1 common quartered white oak.

NORMAN LUMBER CO.

(Mills at Holly Ridge, La.)
40,000 feet 4/4 clear sap poplar.
1 car 9" to 12" poplar boxboards.
50,000 feet 4/4 No. 1 common poplar.
2 cars 6/4 No. 1 common poplar.
3 cars 8/4 No. 1 common poplar.
100,000 feet 4/4 No. 2 A common poplar.

EDWARD L. DAVIS LUMBER CO.

2 cars 4/4 1sts and 2nds chestnut.
2 cars 4/4 No. 1 common chestnut.
5 cars 8/4 1sts and 2nds plain red oak.
5 cars 8/4 No. 1 common plain red oak.
2 cars 8/4 No. 1 common plain white oak.
2 cars 4/4 1sts and 2nds poplar.
1 car 12/4 No. 2 common poplar.

BOOKER-CECIL CO.

75,000 feet 4/4 1sts and 2nds plain red oak. 40 per cent 14' and 16' long.
100,000 feet 4/4 No. 1 common plain red oak.
1 car 4/4 1sts and 2nds plain white oak.
3 cars 8/4 No. 1 common poplar.
4 cars 4/4 No. 1 common poplar.

OHIO RIVER SAWMILL CO.

3 cars 4/4 1sts and 2nds poplar.
3 cars 4/4 sap select poplar.
2 cars 4/4 1sts and 2nds plain red oak.
2 cars 4/4 1sts and 2nds plain white oak.
1 car 8/4 1sts and 2nds plain red oak.
1 car 4/4 1sts and 2nds quartered white oak.
1 car 4/4 1sts and 2nds clear quartered oak strips.
1 car 4/4 1sts and 2nds No. 1 common chestnut.

THE LOUISVILLE VENEER MILLS

is offering to its customers a line of particularly fine figured gum veneers and panels. This stock has been made up from specially selected logs, and shows a figure which is not second to any wood, not excepting Circassian walnut. Those interested will be given samples and quotations on request.

THE EAST

BOSTON NEW YORK PHILADELPHIA

WM. WHITMER & SONS
INCORPORATED

Manufacturers and Wholesalers of All Kinds of

"If Anybody Can, We Can"

HARDWOODS

West Virginia Spruce and Hemlock
Long and Short Leaf Pine Virginia Framing

Franklin Bank Bldg. PHILADELPHIA

Willson Bros. Lumber Co.

MANUFACTURERS

WEST VIRGINIA HARDWOODS

Oliver Building PITTSBURG, PA.

DRY STOCK FOR PROMPT SHIPMENT

2 Cars 4 4 1s and 2s Basswood
3 Cars 4 4 Log Run Birch
3 Cars 5 4 No. 1 Com. & 1s and 2s Oak
3 Cars 4 4 Sap Poplar

Inquiries Promptly Answered

DANIEL B. CURLL, REAL ESTATE TRUST BLDG., PHILADELPHIA, PENNA

West Virginia Hardwoods

WHITE ASH, WHITE OAK, POPLAR, CHESTNUT, Etc.

If in the market let us have your inquiries and we will quote you attractive prices, and guarantee to ship correct high grade

AMERICAN LUMBER & MFG. COMPANY, Pittsburgh, Pa.

WM. E. LITCHFIELD

MASON BUILDING, BOSTON, MASS.

Specialist in Hardwoods

Manufacturers are requested to supply lists of stock for sale

H. D. WIGGIN

89 STATE STREET BOSTON, MASS.

MANUFACTURER HARDWOOD LUMBER

Circular-sawed Poplar, Oak, Chestnut, Basswood, Maple

Mill at Stone Coal Junction, West Virginia

CHARLES HOLYOKE

141 MILK STREET, BOSTON, MASS.

HARDWOODS

We Know How to fill your orders for all kinds of HARDWOODS, WHITE PINE, YELLOW PINE, SPRUCE, HEMLOCK, CYPRESS, HARDWOOD FLOORING.

Give us a trial.

THOMAS E. COALE LUMBER COMPANY

FRANKLIN BANK BUILDING, PHILADELPHIA, PA.

W. R. TAYLOR LUMBER CO.

Wholesalers and Manufacturers

CYPRESS, WHITE PINE, HARDWOODS AND HEMLOCK

1829 Land Title Building, PHILADELPHIA, PA.

PALMER & PARKER CO.

TEAK ENGLISH OAK CIRCASSIAN WALNUT

MAHOGANY VENEERS

EBONY DOMESTIC HARDWOODS

103 Medford Street, Charlestown Dist. BOSTON, MASS.

PROCTOR VENEER DRYER FIREPROOF

AN UNPARALLELED SUCCESS

No Splitting Nor Checking

No Clogging Nor Adjusting



Recommended by all those who have tried it

THE PHILADELPHIA TEXTILE MACHINERY COMPANY

DEPT. L HANCOCK & SOMERSET STS. PHILA., PA.

Both Ends and the Middle

HARDWOOD RECORD reaches most everybody who produces markets and consumes Hardwoods.

Nothing But Hardwoods

THE EAST

LEADING MANUFACTURERS AND JOBBERS

W. P. Craig Lumber Co.

Wholesale Hardwood and Building Lumber

Empire Building, :: PITTSBURG, PA.

BIRCH All we want is an opportunity to quote

Quality speaks for itself

New York Office
25 W. 42d St.
Bryant 7391

Geo. Webster Lumber Co.
SPRINGFIELD, MASS.

Oak Bridge Plank cut to order
for QUICK SHIPMENT
WRITE FOR PRICES
J. S. KENT COMPANY PHILADELPHIA

LET us talk to you about the plain and quartered oak that made Indiana famous. It's the kind we make to-day.

Wood-Mosaic Co., New Albany, Ind.

WISTAR, UNDERHILL & NIXON
REAL ESTATE TRUST BUILDING, PHILADELPHIA, PA.
QUARTERED WHITE OAK
NICE FLAKY STUFF

HARDWOOD RECORD

Not only the ONLY HARDWOOD PAPER but the BEST LUMBER PAPER published

89% of HARDWOOD RECORD subscribers are owners of steam plants. Eighty-nine per cent are, therefore, buyers of wood-working machinery. There is little percentage of waste circulation in HARDWOOD RECORD for machinery advertisers.

Hard Maple
100,000 ft. 4/4
No. 2 Com.

Tupelo Gum or Bay Poplar
100,000 ft. 4/4
Log Run; will grade to suit purchaser.

Ash
30,000 ft. 4/4
No. 1 Com.

WE HAVE IT
W. W. DEMPSEY
Manufacturer and Wholesaler of
HARDWOODS

Cypress
1 carload 4/4
1s & 2s, Clear.
2 carloads 4/4
Selects.
4 carloads 4/4
6", 8" and 10"
No. 2 Com.

Birch
50,000 ft. 4/4
No. 2 Com.

BAND SAWED STOCK

A LINE BRINGS PRICE BY RETURN MAIL

General Offices
Johnstown, Pa.

New York Office
No. 18 Broadway

R. E. Wood Lumber Company

¶ Manufacturers of Yellow Poplar, Oak, Chestnut, Hemlock and White Pine.

¶ We own our own stumpage and operate our own mills.

¶ Correspondence solicited and inquiries promptly answered.

GENERAL OFFICES:
CONTINENTAL BUILDING.

Baltimore, Maryland

We Will Quote Unusually Attractive Prices On the Following List of Band Sawn Poplar:

3 cars 1" 1s & 2s.
2 cars 1½" 1s & 2s.
5 cars 2½" 1s & 2s.
3 cars 3" 1s & 2s.
2 cars 1" Wide Box.
3 cars 1" Narrow Box.
4 cars 1" Saps & Selects.
1 car 1¼" Saps & Selects.
2 cars 1½" Saps & Selects.
2 cars 2" Saps & Selects.
8 cars 1" No. 1 Common.
2 cars 1¼" No. 1 Common.
2 cars 1½" No. 1 Common.
2 cars 2" No. 1 Common.
5 cars 2½" No. 1 Common.
6 cars 3" No. 1 Common.
4 cars 1" No. 2-A Common.
3 cars 1" No. 2-B Common.
6 cars 2" No. 2 A & B Common.
1 car 2½" No. 2 A & B Common.
1 car 3" No. 2 A & B Common.

WE HAVE A SPLENDID STOCK OF PLAIN AND QUARTERED RED AND WHITE OAK, ALL GRADES

Faust Bros. Lumber Co.

SALES OFFICE
CHICAGO, ILL.

MAIN OFFICE
PADUCAH, KY.

Motto

"Buy cheaper direct from the mill man"

WE SELL—

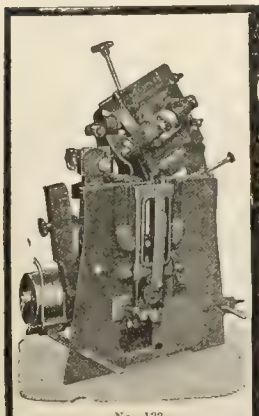
30", 40" AND 50" WIDE POPLAR

Whitson Bros. Lumber Co.

J. H. WHITSON W. L. WHITSON H. T. WHITSON

COOKEVILLE — TENN. — ALGOOD

PUTNAM COUNTY



No 133

Standard for 37 Years

Covel Saw Machinery

The machine shown will automatically sharpen band resaws from 1" to 6" wide, and it is not necessary to touch the saws after they come off the machine.

New Frame Construction.
New Automatic Feed (absolutely accurate).
New Automatic Control of Emery Wheel.
Fifty less parts.

Guaranteed to give satisfaction. We make machinery to take care of all kinds of saws and knives.

Our catalog is free. Ask for it.

COVEL MFG. CO., Benton Harbor, Mich.

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CHICAGO



Hardwood Record



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Review and Outlook

General Market Conditions

STATEMENTS FROM LEADING LUMBERMEN in different hardwood sections of the country would indicate that contrary to the usual condition of affairs, the hardwood trade in the eastern states at present is considerably more active than in the middle-western territory. While the reverse is usually the case, the Middle West for some reasons seems to be slow in picking up. The best evidence that this is a fact is seen in the reports from millmen in the lower Mississippi valley as compared with reports from hardwood mills in the mountain territory of eastern Kentucky and Tennessee and West Virginia. These mills are seemingly almost unanimously optimistic regarding present hardwood conditions. Stocks in that territory are unquestionably well sold up and firmly in hand. In fact, one of the biggest of the eastern Tennessee manufacturers states that the only item on which he is not unusually short is hemlock, and in this he has a very small accumulation, but not enough to cause him a moment's worry. Coupled with this are optimistic reports from consuming sections in the eastern states as against reports of a more or less pessimistic nature coming from the consuming states of the Middle West. It is safe to say that the condition which is now apparent in the East will either maintain its present level or will improve. There is no logical reason why there will be any recession in demand or prices from the present status. It is an equally safe statement that this condition will before very long be duplicated in the now quiet territory through the middle-western states.

In fact, the chief cause for worry among hardwood producers is the general condition resulting from the highly unsatisfactory state of the export market. The extreme laxity in call from abroad, coupled with the policy pursued by most of the wiser element of the export trade to ship as moderately as possible, because of the excessive freight rates, is turning a lot of export stock into the domestic market. There are various factors which taken together hold back export shipments to a very marked degree. Industrial unrest throughout the British Isles, the after-effects of the Balkan hostilities and political agitation in England, all have direct bearing on general conditions in business. These facts, of course, are reflected directly upon the lumber business. The most effective influence, however, is the recently installed schedule of ocean freight rates which makes an almost impossible level of ocean shipping prices. As a result American exporters find it impossible to ship goods in many items at a profit under present market conditions abroad. It is the opinion, however, of those most closely in touch with the general export situation that this disinclination to make large shipments will result in a shortage of stocks abroad which will ultimately effect a decidedly more urgent call for goods to take care of this shortage. Thus exporters while at present rather pessimistic are anticipating a resumption of excellent trade at a not too remote time. This resumption of activity in foreign business will without question reflect favorably upon domestic trade.

The domestic market generally seems to be showing the greatest activity, especially in the states through the Mississippi valley, in the manufacturing lines, such as chair factories, piano factories, etc. All of these trades report unusual activity, and while in the majority of cases they are not buying in large lots, they are consuming a great quantity of lumber, which keeps those supplying them satisfactorily busy.

The slight decrease in the building records for the month of August probably caused to an extent the inactivity in the interior finish industry. This branch of the trade is unquestionably dull.

Reports from northern mills indicate that the Michigan and Wisconsin hardwood producing sections continue in the very favorable condition which they have enjoyed for some little time. The figures for August issued by the association of hemlock and hardwood men in Wisconsin and upper Michigan show that the cut for August was 17,500,000 feet against shipments of practically 22,000,000 feet. These figures, however, as compared with August, 1912, are not distinctly favorable, as the cut reported during that month was about 14,000,000 feet, as against shipments of 30,000,000 feet. These figures can safely be offered as an indication of the condition of trade generally this year. There is no doubt that it is slower than the corresponding months of the fall of 1912, and the reason behind this general condition is everywhere ascribed to "too much politics in Washington." The country is basically in excellent shape but is continuing its policy of marking time.

As to the various hardwood species being offered, oak, plain and quartered, is still very active, but should not be taken as an indication of the general market conditions. Red gum, which has been experiencing a marked slackening in demand, seems to have partially regained its feet, although it is not by any means in a condition which its producers desire.

The diminished call for wide poplar has led a number of the large manufacturers to cut but a limited quantity of the exceptionally wide stock, and to rip a good percentage of it into narrower widths, giving a large quantity of high-grade lumber in more salable form. The ordinary grades of it are of such a staple character generally that this policy seems to be a safe one to pursue.

It is probable, however, that the next month will develop better collections as far as lumbermen are concerned, and will also see a renewal of a much more satisfactory demand for hardwood products.

The Old Swimming Hole

THE COVER PICTURE illustrating this issue of HARDWOOD RECORD will remind the reader that the clock of change is striking the hours in this country. In the distance the furnace for burning slabs and sawdust betrays the presence of an up-to-date sawmill in the immediate vicinity, and in the foreground the line of timbers bolted and chained together shows that the old swimming hole is now put to uses unknown in its early days. A log boom is anchored there, but the pond's depleted condition indicates that the sawmill has had a good run of business and has cut and sold lumber faster than the river could bring the logs down. Scenes such as this are common today on most rivers with forested areas near the sources of their tributaries. Log drives may not be as immense and as spectacular as they once were, but they are far from being things of the past. The "driving flood" is still waited for along the courses of scores of rivers, and some of them flow through thickly-settled regions. The picture shows part of the plant of the Kentucky Lumber Company at Williamsburg, Ky., on the Cumberland river.

With the Currency Bill

THE CURRENCY BILL, advocated and insisted upon by President Wilson, passed the House of Representatives by a vote of 286 to 84 on September 18. The action followed insertion in the measure of a declaration for the maintenance of the gold standard by an overwhelming vote and the refusal to amend so as to forbid interlocking directorates by a vote of 266 to 100. Aside from this change the bill was practically unamended in its essential provisions.

The measure now goes to the Senate where a long consideration before the banking committee awaits it.

The threatened revolt of the Democrats as a protest against the caucus methods through which the bill was forced upon them, failed to materialize as only three members of the Democratic party voted against it. These votes, however, were more than offset by the support received from Republicans and Progressives.

The measure as it passed will eliminate the present American bank note system, under which banks issue currency against government bonds, and establish a currency to be issued by twelve federal reserve banks based on sound commercial paper, which the government assumes the responsibility of redeeming in gold or other lawful money.

The bill, if it becomes a law, will give control of practically every phase of banking to a federal reserve board of seven members to be appointed by the president, and a council of bankers, which will have only advisory powers. Twelve reserve banks would administer the system, these banks to be situated in twelve geographical divisions of the country. They would be capitalized at $5,000,000 each, which capital would be subscribed by the various individual banks in each district.

Senator Owen, chairman of the Senate currency and banking committee, stated a few days ago that he expects his committee to report the house bill within two weeks. The president intends to help Mr. Owen to force the committee to reach an early decision.

Senator T. E. Burton of Ohio attacked the administration currency bill vigorously before the American Institute of Bankers in annual session at Bristol, Va., last week. He condemned the regional reserve bank plan proposed in the bill, but his criticism was aimed chiefly at the provision authorizing the federal reserve board to control the issuance of currency. "It is based on an erroneous idea," he said, "namely that a government or political organization may properly assume the providing of a supply of paper currency, directly or indirectly." It is proposed that the government shall assume in the first instance the redemption of all circulating notes. These, according to Mr. Burton, should be left to the banks exclusively. He said that it might be necessary for the treasury itself to maintain a gold reserve as is now held for the redemption of greenbacks. He said that while the proposed plan would cause no derangement in times of fair weather, it would create a serious obligation for the government to redeem circulating notes in times of panic and might in fact seriously impair the government's credit.

Discussing the plan to put the reserve bank system under the control of a federal reserve board, Mr. Burton said that such an organization might at first seem an ideal solution, but that it is the bane of the national life that politics enter all administrative duties. The competition between opposing parties is so keen that those engaged in enterprises do not feel sure that the authority of a political board will not be used for partisan advantages.

Export Conditions Promising

EVEN MORE SIGNAL EVIDENCE than any yet supplied that the congestion and low prices abroad are causing a great contraction in the exports of lumber and logs from the port of Baltimore is furnished by the statement of shipments to foreign countries for the month of August, which statement was completed about September 8. This shows by comparison with the corresponding month for 1912 that the woods principally affected by excessive forwardings earlier in the year have undergone a most significant shrinkage in exports, the total for the month being less than a third of the value of exports for August, 1912. So pronounced was the check upon the movement that there can be no doubt as to the cause, oak, poplar and other woods being among the principal items concerned. If the shrinkage went on in the same proportion at other ports of the United States, the inference is permissible that it will not be long before the stocks abroad are reduced to such proportions that the foreign buyers will be glad to pay the prices asked by the exporters in order to secure an adequate supply of lumber, for this country remains the principal source of supply, a position from which it is not at all likely to be ousted for many years to come.

The exports of hickory logs fell from 15,000 to 10,000 feet, those of walnut logs from 106,000 to 25,000 feet, those of oak lumber from 3,982,000 to a mere 1,172,000 feet, those of poplar from 275,000 to 167,000 feet, those of "all other woods" from 437,000 to 296,000 feet, those of staves from 105,448 to 9,175, while similarly heavy reductions are to be noted in nearly every additional item on the list. The total declared value of all the exports of lumber, logs and manufactures of wood for last August were only $99,079 against not less than $331,954 for the corresponding month of 1912.

Evidently, there cannot be the slightest doubt that the warnings of leading foreign brokers as to the state of the market abroad and the unwisdom of shipping on consignment are being extensively heeded, and this also suggests that under the circumstances a material improvement in the situation may be expected to make itself felt before long.

A Change of Front

SEVERAL YEARS AGO HARDWOOD RECORD came to a realization of the harmful effect to the lumber industry that was certain to result from a continuance of the propagandists' work carried on by the advocates of the steel car if their work were allowed to progress without opposition from the lumber trade. Recognizing at the same time the practical helplessness of the task of trying to combat the work of the steel interests in furthering the elimination of the wooden railroad coach single handed, HARDWOOD RECORD nevertheless undertook to do its best to at least awaken a sentiment among the lumbermen themselves, which would result in their instigating some move that would have the effect at least of giving the wooden car a fair trial before the court of public opinion.

These efforts were carried on by HARDWOOD RECORD through numerous editorials and special articles that have been run at frequent intervals since their first appearance. All these articles were supplemented by thousands and thousands of reprints, which have been sent broadcast throughout the country to various individuals and concerns who are in a position to affect the situation one way or another. In addition, various personal letters were addressed to different individuals, such as the presidents of the big railway systems of the country, all for the purpose of securing for the wooden railroad coach the advantage of a fair consideration on the part of those in charge of the installation or changes of equipment.

For a long time this work was carried on without attracting any particular attention even. HARDWOOD RECORD is loath to admit, from the lumbermen themselves, who are necessarily most vitally interested

in this broad question. In fact, the apathy exhibited by the lumber trade, with a few notable exceptions, has been rather startling.

There seems, however, to have been a decided change of thought regarding the merits and demerits of the two types of cars in question, and while the old propagandist's type of article in which the steel car is lauded in glowing headlines is extremely common in the daily press, HARDWOOD RECORD has secured in the last few months numerous clippings from the daily press in various parts of the country, all of which papers are in good standing, in which the line of thought outlined in various articles appearing in this publication, has been followed closely. These articles have pleaded for a fair trial for the modernly constructed wooden car and that the public be not too anxious to claim the steel car to be a saver of life without ascertaining pretty definitely whether or not such a claim is based on absolute fact.

HARDWOOD RECORD will not be so foolish as to claim that this publication's articles alone have effected any country-wide change in sentiment regarding the steel railway coach, but it is absolutely certain that in a number of the instances referred to the papers in question have been convinced and have secured their lines of arguments from the articles appearing in HARDWOOD RECORD previously.

Another interesting phase of the situation has developed during the last few months in connection with the remainder of the lumber trade press. HARDWOOD RECORD has never suggested directly that the other papers might further the cause of the lumber business by following up the same question with a united front on the part of the lumber papers themselves, but has felt nevertheless that if the rest of the papers published in the interest of the lumber business would adopt a broader view of the matter than to consider it merely as a policy adopted by a competitor, and which they hence could not adopt, the effort would be given much greater weight. On the contrary, the efforts of HARDWOOD RECORD were in some quarters received at first with more or less ridicule, but HARDWOOD RECORD is delighted to note the change in sentiment recently evidenced in the editorial pages of its contemporaries in the lumber business. Practically all of the leaders in the lumber trade journal field are now carrying more or less connected arguments along the same lines as those originally suggested by HARDWOOD RECORD.

It is to be hoped that this united effort is not too late to be productive of the desired results.

Export Rates and Through Bills Via New Orleans

A NUMBER OF PROMINENT exporting firms in Memphis who recently refused to sign for ocean freight room have within the past two or three weeks entered into annual contracts for their needs for the ensuing year. As a rule rates are somewhat higher than those which prevailed last season, but the efforts of local exporters to get them lowered through refusing to sign earlier have apparently failed. The export movement of cotton is not as large as was anticipated and advices from Galveston and New Orleans indicate that freight rates may go somewhat lower. There are some exporters of lumber who have not yet renewed their contracts and they may possibly profit by the somewhat lower tendency of ocean rates.

The west side lines have entered into an agreement with the steamship companies, or rather with a half dozen of the larger ones, through which the latter will honor through bills of lading on exports of lumber. The west side lines, it would appear, put the issue squarely up to the steamship companies with the statement that they would not participate in through bills of lading on cotton if the steamship companies did not honor through bills of lading on lumber exports. It is believed here that the action of the steamship companies entering into this agreement will force the other steamship companies to take similar action, with the result that the bill of lading controversy is regarded as well along toward settlement so far as the west side lines are concerned. The Illinois Central and other east side lines were to have discontinued through bills on lumber Sept. 15, but the date has passed and they have not done so. Officials of the Illinois Central have had the matter under advisement during the past two or three days, but no decision has been reached. J. H. Townshend, general manager of the Southern Hardwood Traffic Bureau, stated recently that, in his opinion, the action of the Illinois Central would depend largely upon the lumber exporting firms. He said that if the latter did not rush lumber shipments into New Orleans in such manner as to cause congestion and long delays in that center the Illinois Central would probably continue to issue through bills on lumber. He also called attention to the fact that, with a car shortage impending, the Illinois Central would insist upon the loading of all cars to full capacity where export shipments are concerned. Mr. Townshend, who is very closely in touch with traffic conditions and who has been handling this bill of lading controversy, believes that the outlook is very bright and that the matter, if the lumbermen cooperate with the railroads and steamship companies, will settle itself. Already conditions are regarded as vastly improved and there is a larger movement of lumber into export channels than has been the case for some weeks.

Lumber Cut and Shipments Compared

FIGURES RECENTLY PUBLISHED by the Northern Hemlock and Hardwood Manufacturers' Association furnish interesting comparisons in the cut and shipment of lumber for August, 1912, and for the same month in 1913. In that month in the first year fifty-seven firms cut 46,308,000 feet of hemlock, and shipped 46,831,000 feet; in 1913 the same firms cut 43,929,000 feet, and shipped 32,110,000. There was a decrease of five per cent in the cut, and a decrease of thirty-one per cent in the shipments, comparing the latter month with the former. The cut of all hardwoods in August, 1912 was 13,793,000 feet, shipments 29,883,000; cut for the same month in 1913 was 17,523,000 feet, shipments 21,923,000. The increase in cut was twenty-seven per cent, decrease in shipments twenty-seven per cent. Considering both hardwoods and hemlock, the increase in total cut was two per cent, decrease in total shipments thirty per cent.

This means overproduction and an accumulation of stock, if the figures are taken at their face value. A single month, however, is a short period on which to base general conclusions. Local factors or temporary influences may produce results which would not appear if long periods were considered.

The cut of the hardwoods in the month of August, for both years, falls far below the shipments for the same time, which is seen as follows, the figures representing feet:

Wood	*Cut Aug.*, 1912	*Shipped Aug.*, 1912	*Cut Aug.* 1913	*Shipped Aug.* 1913
Ash	354,000	940,000	493,000	900,000
Basswood	2,670,000	4,389,000	2,798,000	3,487,000
Birch	3,655,000	8,938,000	4,639,000	8,455,000
Elm	1,457,000	2,599,000	1,125,000	1,782,000
Maple	3,819,000	9,665,000	5,971,000	4,292,000
Oak	145,000	186,000	293,000	295,000
Mixed	1,693,000	3,166,000	2,204,000	2,712,000
Total	13,793,000	29,883,000	17,523,000	21,923,000

Significant Car Statistics

THE REGULAR STATISTICAL BULLETIN of the American Railway Association under date of September 22 gives the usual figures covering total surpluses and shortages of freight cars. On September 15 the total surplus of all freight cars was 61,753, and the surplus on September 1 was 73,576. The surplus on September 12, 1912, was 27,380.

The total shortage on September 15 was 21,594 cars; on September 1, 15,270, and on September 12, 1912, 36,000 cars.

There is a two-fold significance in these figures. For instance, a comparison of the surplus and shortage figures for September 15 as compared with September 1 will show that the surplus on September 15 was 11,823 cars less than on September 1, while the shortage increased during the same period by 6,324 cars. This would indicate that the available supply of freight cars is becoming constantly less with the increasing movement of the grain, cotton and other crops. This decrease in available cars is not, however, as startling as the

situation appears to be in certain local shipping sections, particularly in the South.

A further significance is seen in a comparison with the figures for September 15 with September 12, 1912. As stated the surplus on September 15 of this year was 61,753 and on September 12, 1912, 27,380. This would indicate that the car surplus September 15 of this year was 34,373 cars greater than on the corresponding date of 1912.

Further, the shortage on September 15 was 21,593 as compared with 36,000 on September 12, 1912, a decrease in shortage of 14,406 cars. Some reason for this is seen in the fact that the total grain crop movement of this year was not up to the movement of 1912, but on the other hand the cotton crop of 1913 is far ahead in volume of that of a year ago. The natural deduction is that the difference in car statistics for the two years was the result of a decrease in the general shipping of the country this fall as compared with the fall of 1912.

This situation is seemingly well borne out by trade reports covering the various lines of industry of the country.

Public Ownership of Forest Lands Advocated

PROFESSOR JAMES WILLIAM TOUMEY, head of the Yale Forest School, recently published a review of forest history in this country and in Europe in which he draws the conclusion that the woodlands of this country should be owned by the general government, the states and municipalities—that is, there should be public ownership in one form or another. He doubts whether the government will ever come into possession of much more land than it now owns. It is buying some under authority of the Weeks' law, but such purchases will probably remain small in comparison with the country's whole forest area. The reason why public ownership is to be preferred is that many private owners either will not take care of their timber or will cut it for immediate profit when it should be left to increase in value. Examples in history are cited to show that such has been the case in other countries.

Professor Toumey writes from the standpoint of the professional forester, and his thorough acquaintance with German methods is noteworthy. If his article calls for any criticism it is because he shows too little sympathy with the kind of forestry which nature has developed and is still practicing in this country. He does not think that natural forests, at this time, are of much real importance, and that no permanent headway can be made in supplying timber until man-directed forestry takes the place of nature's. "American forestry is not much concerned with the remaining stand of timber," he says, and adds: "The sooner cuttings can be made over the remainder of our virgin stands, the better from the standpoint of new growth."

Many people are not yet ready to subscribe to this view. Natural forests, which grew with no help from man, are yet so extensive that haste should not be made in cutting them down in order that forestry, such as is practiced in Germany, may be substituted. The frequent warnings that lumber supplies are on the verge of exhaustion in this country have produced erroneous impressions, and possibly have misled Professor Toumey into underestimating the true importance of the country's standing timber. The report published last January by the Department of Commerce and Labor gives the latest authentic figures, and shows that the country is not yet in desperate circumstances. The table which follows gives the standing timber of seven species, and the period each will last at the present rate of cutting:

Species.	*Feet board measure.*	*Will last years.*
Douglas fir	521,900,000,000	100
Western yellow pine	153,400,000,000	98
Redwood	101,900,000,000	190
Western hemlock	57,400,000,000	315
Western red cedar	56,700,000,000	100
Sugar pine	34,700,000,000	350
Idaho white pine	19,600,000,000	80

It would seem like undue haste to hurry through with cutting this natural-grown timber in order that German methods of forestry may be put into practice. There are some things in which nature can beat Germany.

All of the above timbers grow in the far western country. The situation is not quite so good in the East, where cutting has been in progress much longer; but forest exhaustion is yet some distance in the future, according to estimate based on the report by the Department of Commerce and Labor quoted above. The hardwoods make the following showing:

Species.	*Feet board measure.*
Oak	200,239,000,000
Gum	53,443,000,000
Hickory	19,208,000,000
Ash	16,584,000,000
Miscellaneous hardwoods	115,108,000,000
Total	404,582,000,000

At the present rate of cutting this will last forty-five years, and the forests of the whole country will last seventy years.

The ground on which these forests stand is not yet needed for planting. There is plenty of cut-over land for everybody to plant. The government, states, cities, corporations, and individuals may do all the planting they can finance during the next hundred years without touching an acre on which merchantable forests are now standing.

Public ownership of woodlands will probably come, to a large extent. The tendency is in that direction, but it will not come suddenly. Wood-lot forestry, such as enables Ohio, Indiana, and Illinois to furnish hundreds of millions of feet of lumber annually, with little apparent falling off from year to year, will spread over the country, and become an important factor in supply. There is not and never will be any call for the government or state to own such woodlots; but the case is different with large deforested areas which the individual is not able to hold and handle successfully. Public ownership may be expected to enter gradually upon the work of managing such lands.

Proposes Track Scale Control

PROVISION IS MADE in a bill recently introduced by Representative Willis of Ohio, at Washington, for government control of railroad scales and regulations and weighing methods used in connection with freight shipments. The Interstate Commerce Commission is the body which would have jurisdiction in the matter.

June 30, 1915, is the date named in the bill for the putting into effect of this provision. According to its text, after that date it will be unlawful for an interstate common carrier to use a scale or test car not conforming to the standard type determined by the Interstate Commerce Commision. The bill provided for the preparation of a plan by the American Railway Association in behalf of the railroads covering specifications for railroad scales and test cars, and similar weighing devices that will be of a practical and serviceable nature. The plan should embody suggestions that could be used in connection with the formulation of a code of service for freight weighing. The railroads are given until June 30, 1914, to work up such suggestions as they wish to advocate. The bill provides that if such suggestions are not in the hands of the Interstate Commerce Commission by the date named, the commission will go ahead on its own initiative in the matter and is given authority to definitely formulate a code of standard rules for freight weighing, and to put such testing devices and scales into operation as it deems proper.

The commission is also given the power to specify the number of scales that each railroad shall provide for weighing, and to designate their location, and also to determine the frequency and manner of inspection and testing of scales.

The commission has made earnest efforts to effect a conference between the American Railway Association representatives and representatives of the National Industrial Tariff League for the purpose of working out the problem as expeditiously as possible. Such efforts, however, have seemingly been unavailing, and the commission cabled a conference for September 24, details of which are not yet available.

The Willis bill seems to be fair in most of its provisions, and it is difficult to see wherein the railroads should object to government regulation of their scales and weighing methods, unless through pernicious methods they have been gaining an undue revenue from weighing through wrong methods and incorrect scales.

Pert, Pertinent and Impertinent

Today

Write it on your heart that every day is the best day in the year. No man has learned anything rightly until he knows that every day is doomsday. Today is a King in disguise. Today always looks mean to the thoughtless, in the face of an uniform experience that all good and great and happy actions are made up precisely of these blank todays. Let us not be so deceived let us unmask the King as he passes.—*Ralph Waldo Emerson.*

Not Much

"I hear Brown's been promoted again."

"Yes."

"That's splendid! He must be quite an important member of the concern now."

"Oh, I guess not. The office boy still calls him by his first name."—*Detroit Free Press.*

The Difference

'Twixt modest man and egotist
The difference is wide:
One thinks he never would be missed
If he tomorrow died.
The other thinks, when he sheds tears,
That every scene is bleak,
And fancies that the whole world hears
When he wears shoes that squeak.

—*Chicago Record Herald.*

Mutual Admiration

"You are getting very bald, sir," said the barber.

"You yourself," retorted the customer, "are not free from a number of defects that I could mention if I cared to become personal."—*Louisville Courier Journal.*

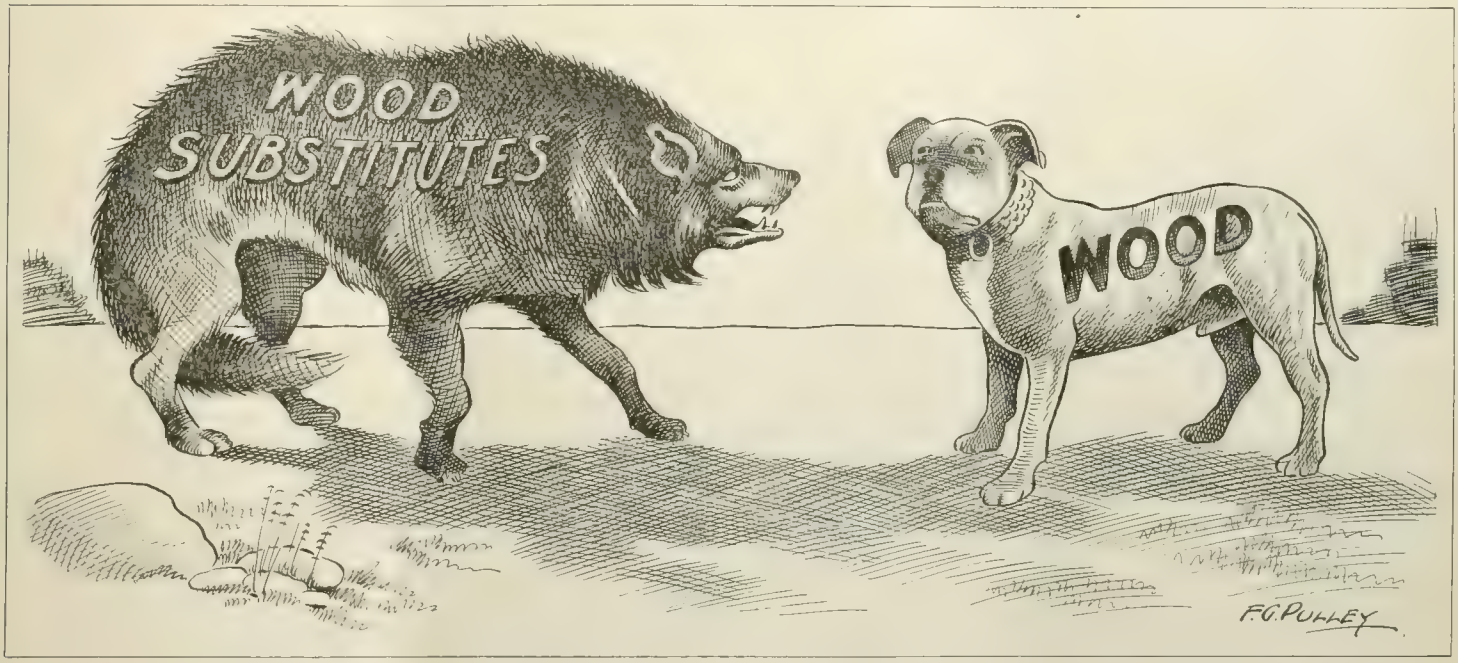
With Apologies to Longfellow

This was the forest primeval. The murmuring pines and the hemlocks,
Planed and veneered, in coats of shellac and new varnish,
Stand like Chippendale "highboys," with dainty lingerie coverlets;
Stand—full of buckshot (for wormholes), with drawers brass-handled and polished.
Loud, from the long-distance telephone, the deep-voiced, persistent dealer
Calls in accents decisive after the monthly installments. *B. K. Hart, in Puck.*

Life

This world is like a crowded 'bus;
A few good men, perhaps,
May find a seat, but most of us
Must hang on by the straps.

WOOD vs WOOD SUBSTITUTES



The Smaller Dog: You're a big, tough-looking brute, but I believe I can whip you in a fair fight.

Not Mercenary

"I have a friend who just marries for money."

"Why, how disgraceful!"

"No, not exactly. You see, he's a minister."—*Cornell Widow.*

Ought to Know

She—"George, dear, here's a scientist who says the earth is wabbling on its axis. What do you suppose they can do about it?"

George (*absently*): "Open up the muffler, reverse the lever, shut off the power, lubricate the bearings, and tighten the wheel cap."—*Cleveland Plain Dealer.*

The Main Problem

"Yes, I'll admit the automobile problem is bothering me a good deal."

"You mean paying for repairs?"

"No, keeping myself alive."—*Cleveland Plain Dealer.*

Rejected

He—"Be mine and you will make me the happiest man in the world."

She—"I'm very sorry; but unfortunately I want to be happy myself."—*Boston Evening Transcript.*

Why?

Masseur—"The muscles of your neck need attention; you should turn your head rapidly, say, fifty times, night and morning."

Chestmay—"But I do. I walk up and down Fifth Avenue twice a day."—*Life.*

Unusually Intelligent

"You saw this horse?" asked counsel for the defendant.

"Yes, sir, I——"

"What did you do?"

"I opened his mouth in order to ascertain how old he was, and I said to him, I said, 'Old fellow, I guess you're a good horse yet,'——"

At this juncture opposing counsel leaped to his feet. "Your honor," he cried, "I object to the statement of any conversation between the witness and the horse when the plaintiff was not present."—*Our Animals.*

Feared the Other

The man of great financial prominence had met with an accident.

"We'll have to probe," said the doctor.

Just at that moment the man recovered consciousness and exclaimed:

"If it's a surgical operation go ahead, but if it's another investigation, give me an anesthetic."—*Washington Star.*

Purposeless Game

The Englishman was attending his first ball game. He seemed very uneasy after the fifth inning and finally said to his American friend:

"I say, old chap, when do they serve the tea?"

"They don't serve tea at a ball game," laughed the American.

"No tea between innings," gasped the Englishman. "Then what's the object of the blooming game?"—*Argonaut.*

Girl Friend

"What lovely hair she has!"

"Yes; and that kind is expensive."

Building a Story

"How about that dialect story of yours?" asked the impatient editor.

"Coming right along, sir," replied Mr. Penwiggle. "I have all the punctuation marks written and it won't take me more than half an hour to fill in the letters."—*Washington Star.*

Eucalyptus Lumber

Abstract of Report by H. D. Tiemann, Forest Products Laboratory, Madison, Wis., U. S. Forest Service, Department of Agriculture.

PART I

The object of this publication is not to discourage the planting of eucalyptus, but to place such projects upon a sound rather than a fictitious basis, and to show that other species than blue gum are more suitable for many purposes, particularly for saw timber. So much has been published about the fabulous values of this genus of trees for hardwood lumber, founded solely upon fictitious and prospective properties, that many people have been led to invest in planting these trees in the belief that marvelous returns would be realized in the form of hardwood lumber equal in quality to hickory or oak in ten, fifteen, or twenty years' time. When all of these delusions have been cleared away, as ultimately must occur, there is danger of a reaction which will put an end to all future planting.

A clear annunciation of the real facts, so far as known, is earnestly called for by present and prospective investors. If the planting of this tree in California is to continue in the future, and it is of great importance to the state that its importance should not be brought to a standstill, the operations must proceed on a legitimate and not upon an inflated basis. The following article has been written to give the facts as far as they are at present known. The conclusion of our research and experiments is that the blue gum is not suitable for lumber until it has passed an age of at least from forty to fifty years, and a diameter of three feet or more. Even so, it is much inferior to many other species of eucalyptus of slower growth, many of which do not thrive in California, but one and possibly two appear to be suitable for planting in this state. The statement does not imply that small, selected pieces of wood may not be obtained from smaller trees, even of the blue gum, but the proportion is too small and the waste too great to make the young trees profitable for lumber. This fact is fully realized even in Australia, where no trees under two or two and a half feet in diameter, even of the best species, as jarrah (*Eucalyptus marginata*) and tooart (*Eucalptus gomphocephala*), are considered fit for the saw. The heart of even the largest trees is conceded to shrink, warp, and check badly, and is always discarded. No tree under thirty years of age is used, and generally the ages range from fifty to two hundred years, and older.



BLUE GUM GROVE ABOVE BERKELEY BY THE DRY KILN. THE TREES IN THE PICTURE ARE BETWEEN 1 AND 1½ FEET IN DIAMETER AND AVERAGE 110 FEET HIGH, APPROXIMATELY 33 YEARS OLD. SOME TREES ARE 135 FEET HIGH.

In considering the utilization of eucalyptus for lumber, certain facts will be conceded to start with. First, the wood must be thoroughly dry before it is of any value; second, it must be free from checks or honey-combing; and, third, it must not warp, shrink, or swell unduly with atmospheric changes, if it is to be of good quality. Can eucalyptus fulfill these requirements?

That the wood of most species of eucalyptus, including blue gum, is very hard, very strong, of a beautiful appearance, and susceptible of a good polish, there is no question. In fact, it is apt to be too hard, making it difficult to work. The problem then of the utilization of California eucalyptus for lumber is simplified to whether it can be successfully dried without checking or warping, and whether it will keep its shape after it is dry.

For the purpose of determining these questions, the Forest Service began a research in 1911 at Berkeley, Cal., where a small dry kiln was erected by F. C. Havens, in co-operation with the Forest Service. The kiln was built according to a special design invented by H. D. Tiemann of the Forest Products Laboratory. Humidity and air circulation are controlled by sprays of water. The species dried was chiefly blue gum *(Eucalyptus globulus)*, from a grove in North Berkeley near the kiln, and a grove in Piedmont and one large tree from the roadside three or four miles east of Piedmont. Other species were also dried, from various parts of the state, including red mahogany and sugar gum from the experiment station at Santa Monica, and some "San Jose" blue gum.

Little need be said here regarding the growing of eucalyptus in California, as there is extensive literature already on the subject; but there is practically no authentic information in regard to the lumber produced by these trees.

Unfortunately, the species has been unduly exploited on the basis of the lumber which it should produce in an incredibly short time. The fallacy in the argument is plain, but it has been frequently overlooked in the glare of the imaginary future prospects. Dry eucalyptus lumber of excellent quality can be obtained, especially that from the older trees of Australia, and from species other than blue gum; and it is used commercially to a large extent. For many purposes it is equal to American white oak; and for some purposes, when a very hard wood is required, such Australian species as jarrah, karri, tooart, and red mahogany, no doubt excel in valuable qualities.

The eucalyptus heretofore planted in California has been mostly the blue gum. It forms splendid looking timber trees in a marvelously short time, which in fifteen years, if superficially measured for volume or board feet, will scale an incredibly large figure, equal to any other hardwood of fifty or seventy-five years of age.

But here is just where the fallacy comes in. To what does the scale apply in measuring the contents of these young trees? Is it lumber, such as can be procured from the old mature trees grown in their native habitat? Or, is it something different? Something which is only near-lumber? Is it logical to apply to young trees the

properties which belong to mature or carefully-selected timber?

Evidently not. The wood of young trees, especially the blue gum, shrinks and warps so excessively that it cannot be regarded as lumber in any true sense. Wood of good quality as lumber does not appear to form under thirty years of age, and only in trees over two feet in diameter. The older and larger the tree the better is the quality of the wood.

The great value of the young blue gum trees for fuel, windbreaks, soil protection and drainage, medicinal purposes, oils, etc., and of some species for posts, ties, and piles, has been well established on facts, and in many cases fully justifies the planting of this tree. The wood, moreover, has been utilized in small sizes, such as insulator pins, tool handles, and to some extent as vehicle stock. Profits should be figured upon this basis and not upon fictitious values for lumber by ascribing the properties of large Australian timber to this young growth.

The first recorded planting of eucalyptus in California is that accredited to Mr. Walker of San Francisco, who is said to have planted fourteen species in 1856. It is doubtful if any of these trees are now standing. In 1860 the importation of seed was started by nurserymen. Steven Nolan of Oakland has been given credit for the first actual distribution of trees throughout the state, though it is doubtful if any of his trees were established in plantations of commercial importance. By 1870 eucalyptus, mostly blue gum, was becoming well known throughout the state. The California Board of Forestry distributed many trees to planters in 1886, 1887, and 1888. In 1877, or shortly after, the Southern Pacific procured many seedling from nurseries in Oakland and planted them along rights of way in Alameda county, in all 44,000 trees, mostly blue gum. They grew well, reaching a height of from twenty-four to twenty-six feet, and diameters of from eight to ten inches, in four years, but were then used for engine fuel. The first extensive plantations in southern California were made by Ellwood Cooper in 1872 and 1873 near Santa Barbara.

At San Jose there are many trees growing along the road sides said to have been planted by Bishop Taylor of the Methodist church from seeds which he brought from Australia about 1869. These are the trees used by T. J. Gillespie* for his lumber, and designated by him as "San Jose gum."

The oldest trees in California cannot, therefore, be more than fifty-six years old, and it is doubtful if any now standing are over fifty-two, and none in groves are over forty years. The grove at the dry kiln at Berkeley was about thirty-three years old, and the trees growing about Piedmont are probably from thirty to thirty-six. It was not until 1904 that eucalyptus was planted on a commercial scale for timber.

Blue gum is probably the fastest growing tree known. Under favorable conditions it attains a height of 150 feet and a diameter of from three to five feet in thirty years. Yields of seventy-five cords per acre every seven or eight years are not uncommon. This

*Mr. Gillespie has been a eucalyptus lumber manufacturer at San Jose for many years and claims that he has found in these trees a distinct variety of blue gum of greatly superior quality.



GROVE OF *E. CORYNOCALYX* PLANTED DECEMBER 11, 1902.



GROVE OF *E. RESINIFERA* PLANTED MARCH 1, 1903.

These two groves are adjacent to one another in the same relative positions as shown on this page. Both groves are ten years old. In each view all of the trees visible are of the respective species designated.

is evidently the short cord of ninty-six cubic feet. The statement is substantiated by actual measurements. Twenty-four different plantations from five to forty years old show a mean annual yield of from 1.5 to 7.4 long cords per acre, the maximum being for a grove in Alameda county twenty-five years old. In this grove the greatest height was 150 feet and the greatest diameter eighteen inches. In a grove near Pasadena, planted in 1885, there were in 1900 some trees two feet in diameter and many over 100 feet in height. Trees five and six feet in diameter and 175 feet high have been measured, twenty-four to thirty years old.

The average coppice growth of New England hardwoods is at the rate of 0.6 to 0.7 cords per acre per annum. Comparing these two hardwoods shows the stupendous rate of growth of the eucalyptus. In eight years blue gum yields fifty-six long cords per acre; New England hardwoods in the same time yield 6.7 to 7.8 cords per acre. The yield of eucalyptus in volume is from seven to eight times as great as the best quality of mixed hardwoods. One remarkable thing about blue gum is that it maintains its rapid rate of growth for twelve or fifteen years, and in many cases it continues with very little diminution for thirty years or more.

While blue gum is not the tallest of the eucalypts in its native habitat, and while it does not equal other species in any of its specific qualities, except rapidity of growth and general adaptability, Baron von Mueller calls it the prince of eucalypts, the third tallest of the species. Abbott Kinney calls it "a sort of average eucalyptus, tall, but not the tallest, used for general purposes, even to piling and shipbuilding. It is not the best timber for any of these purposes; not the most lasting in air, ground, or water."

Before describing the drying experiments, a systematic analysis of what has already been learned of the wood of the various species of the genus will be of value. It will become evident that blue gum is not considered, by authentic writers, of much value for lumber, nor is it durable. By a careful study of the statements of those most familiar with the growing of blue gum in California, supplemented by our own observations, and the authentic writings of those who are familiar with the woods of the different species in their native habitat, an attempt will be made to classify this information, and to show what species are suitable for growing in California—for saw timber, durability in the ground, and for piling. It will be found that out of seventy-five or more well-known species tried in California, the number sifts down to a very few. In fact, for general planting throughout the state for saw timber, it appears to reduce to only one, red mahogany *(Eucalyptus resinifera)*. The list does not purport to be complete or final, but simply to indicate from what knowledge at present exists on the subject what species should be planted for specific purposes under given conditions.



NEAR VIEW OF TREE NO. 110, SHOWING CHARACTER OF BARK AND 24 FEET OF CLEAR LENGTH.



BLUE GUM TREE JUST AFTER FELLING, SHOWING CHARACTERISTIC CHECKS WHICH OCCUR DIRECTLY THE LOG IS SAWED ACROSS, PRODUCED BY THE INTERNAL STRESSES.

At the present time the blue gum is about the only species in California available in any quantity for sawlogs. Other species have been and are being planted with a commercial view, particularly for lumber and timber. They have in general not yet reached a sufficient size to prove their suitability for the purpose, although a few scattered specimens of some of the species over thirty years old may be found. All we have to go by is the statements regarding these species in other countries or in their native habitat.

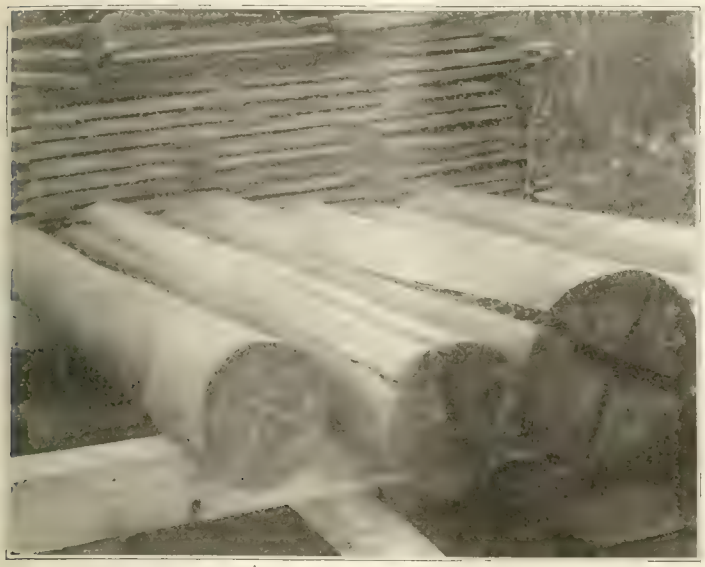
There is a remarkable variance in the statements of different writers in regard to some species. The only way in which a sane judgment can be arrived at, without personal experience with the particular kind of wood in question, is by studying the concensus of opinion. This variance of opinion may arise through lack of sufficient knowledge concerning the wood, or to difference in age or place of growth.

A digest of literature on the subject, together with the observations of members of the Forest Service, indicates the following species as suitable for planting in certain regions of California on account of climatic adaptibility and for the purposes of obtaining durable wood for posts, ties, poles, etc., or for saw timber. Only a few will grow well in nearly all parts of the state, exclusive of the mountains:

1. Red mahogany *(E. resinifera)* is the straightest tree of the species, but only about two-thirds as rapid in growth as blue gum; endures drouth and frost, is suitable for a wide range of climate, but not for growing in alkaline soils. The wood is said to be very durable, strong, excellent for lumber, not very susceptible to attack by teredos. It is of a beautiful rose-pink color.

2. Sugar gum *(E. corynocalyx)* is a rather small tree of comparatively slow growth, exceedingly drought resistant and endures alkali soil and some frost. The wood makes an excellent saw timber, but is said to vary with the nature of the soil in which it grows. It does not warp or shrink badly. It is fairly durable in the ground, and resistant to the white ant.

3. Tuart [illegible] is a medium sized tree. Speci



TWO BLUE GUM AND ONE MANNA GUM LOGS WHICH HAVE BEEN STEAMED AND ALLOWED TO COOL IN SATURATED VAPOR. THE LARGE CHECKS MEASURE 2½ INCHES ACROSS.

mens at Santa Monica are somewhat crooked in form. It does not stand hard frost but is said to grow well on the southern coast of California and fairly well in the dry valleys. Its adaptability to California, however, is not well known. It is said to be the best of the eucalypts for saw timber and one of the most durable under ground.

4. Blackbutt *(E. pilularis)* is a tall tree, but does not stand either extreme heat or frost. It is said to do best on the southern coast, but not in the hot, dry valleys. It is the most durable of the genus, but warps and checks badly in drying.

5. Red gum *(E. rostrata)* is a medium sized tree of fairly straight growth in close plantations on good soil, but grows crooked in the open. It is not as rapid in growth as blue gum. It stands slight frost and alkali soil, but not extreme cold or heat. It does best in moist situations and will endure inundation. The wood is very durable under ground but warps, checks and shrinks badly in drying. It is said to resist white ants, and is brownish-red in color.

6. Gray gum *(E. tereticorius)* is a tall tree but inclined to grow crooked even in close plantations. Its growth is about the same or slightly less rapid than that of red gum. It endures slight frost and considerable drought and will stand inundation. It is fairly tolerable of alkali soil. The wood is said to be fairly durable under ground, but warps, shrinks and checks badly in drying. It is brown or slightly reddish-brown in color.

7. Red flowering ironbark *(E. sideroxylon var. rosea.)* is a medium sized tree of fairly good form, but inclined to be rotten hearted and contain resin pockets. It is of a deep, cherry-red color; very durable in ground; dries splendidly without undue shrinkage, or warping or checking, but is unsuitable for a lumber tree on account of its growth characteristics. It endures frost, but not extreme drought or heat.

8. Broad leaved ironbark *(E. siderophloia)* grows best in moist situations free from frost, but endures slight frost. It does not endure extreme heat or drought; is a tall tree, rather a slow grower in California, fairly straight in form; not well known. Its wood is said to be very durable under ground, but its suitability for lumber not well known.

9. Leather jacket *(E. punctata)* is a medium to large tree of fairly rapid growth and very straight in form. It endures frost and is said to endure heat and drought. The wood said to be very durable under ground. Properties for lumber are not well known.

10. Swamp mahogany *(E. robusta)* is a medium sized tree of very rapid growth and splendid form. It does not endure drought or severe frost, but will survive inundation and grow in water. The wood is said to be fairly durable in ground, and to be resistant to the white ant. Its qualities for lumber are not well known.

11. The blue gum *(E. globulus)*, karri *(E. diversicola)* and the manna gum *(E. viminolis)* are rated as neither durable nor suitable for lumber, which has proved true in the experience of the Forest Service with the blue and manna gums. The blue gum, however, heads the list as resistant to marine borers. Recent tests in San Francisco harbor, however, do not substantiate this report.

Very little is known in regard to the wood of the bastard mahogany *(E. botujoides)* although the trees grow well at Santa Monica and are of fairly good form.

Jarrah *(E. marginata)* is considered one of the best for lumber in Australia, and the most durable and resistant to marine borers, although doubt is thrown upon the last, at least for San Francisco waters, by the results of some piles reputed to have been of this species. It is also said to be resistant to attack of the white ant. Unfortunately, however, jarrah is reputed not to thrive in the state, and no specimens could be found.

There are many other species of eucalyptus which will grow in more or less wide range throughout California, but they are all unsuitable for either lumber or poles for various reasons.

This list of species is not intended in any sense as final, but merely the logical conclusion from a carefuly study of authoritative literature, taking the qualities and uses of the wood from the statements concerning Australian material, and the growth requirements and form of tree from actual experiences of various writers in California, as well as descriptions of the species in their native habitat, supplemented by my own observations.

One fact is most striking and significant: blue gum *(globulus)* is considered far from the best of the woods, either for saw timber or for durability. Yet it is the one species that has been planted and extolled above all others in California. Why is this so?

It would seem as though in the mad haste of planting anything by the name of eucalyptus, enthusiasm had carried away discretion, people having been misled by the general outward appearance of the



TOP END OF LOG NO. 110 DIRECTLY AFTER SAWING TRUNK IN TWO. NOTE LACK OF USUAL CHECKING WHICH OCCURS IN SMALLER TREES.

tree without pausing to read the writings of those who have studied the subject, or to look to the experience of those familiar with the lumber in its native land.

The blue gum is indeed the most rapid grower of the genus in the long run, though not the tallest, and forms an imposing tree, and one which *looks* as though it would make splendid timber. Doubtless this is one thing which has been in its favor. Another has been its remarkable adaptability to a wide range of growth conditions, so that it could be planted all over the state. It endures considerable frost and drought. Then, also, it has been planted largely for purposes irrespective of lumber, as firewood, windbreaks, etc., for which purposes it fully meets all anticipations. But it is a mistake to look upon it primarily as a timber tree.

In regard to saw timber, as that is primarily the subject with which we have to deal, an examination of the lists of species which we have derived seems to indicate red mahogany *(Eucalyptus resiniflora)* as the only all-round tree for this purpose. Further drying experiments, which were made in the winter of 1912-1913 were inconclusive as to this species, for the reason that the oldest trees which could be found in the state were only ten years old and not over nine inches in diameter. The wood of these immature trees, however, three of which were obtained from Santa Monica, behaved, if anything, better than blue gum and manna gum of the same age and size; but it is impossible to predict how the mature timber would act. The rate of growth of manna gum at the Santa Monica experiment station is at best hardly two-thirds that of blue gum, although it is reported to exceed the latter in the Hawaiian Islands.

Sugar gum seems to be another promising species for regions free from severe frost, and especially for dry valleys, but here again, its growth is much slower than blue gum's, and it is a comparatively small tree, and generally grows crooked. It is said that there is a great difference in the value of the timber produced by this species, according to soil and region of growth, being best on heavy, strong soils, and poorest on sandy ones. The drying experiments of 1912-1913, fully substantiate the claims concerning the wood of the sugar gum. That from a twelve-inch tree grown at Santa Monica dried as well as a piece of ash. The form of the tree, however, is inferior to *resinifera.* The illustrations on page 21 show a grove of sugar gum and one of resinifera, both of the same age—ten years old—growing side by side at the Santa Monica experiment station.

Tooart is another species which seems promising for warmer climates, free from frost, both moist and semi-arid. Neither the timber nor the growth conditions seem to be very well known. A recommendation of this species must be made somewhat reservedly. It was impossible to obtain a tree of this species for the drying experiments, as the only mature trees which could be found are three specimen trees at Santa Monica, with which the authorities were unwilling to part.

In connection with the blue gum, further mention should be made of certain trees growing at San Jose which Mr. Gillespie has been cutting for a number of years and which have yielded excellent material, quite different from the ordinary run of blue gum. Mr. Gillespie claims that they are a distinct variety of blue gum, grown from seed brought from Australia. Botanists have examined these trees and have found no distinction botanically from the blue gum; yet it is not unreasonable to suppose that a difference in physical properties might exist, even though no morphological distinction in the leaves and fruit is discernible. We know this to be true of other trees. Some are hardier than others, although no variety is distinguishable, and other differences sometimes occur.

There would seem to be very good ground, therefore, for the contention that the "San Jose gum," as Mr. Gillespie terms these trees, might really be a distinct variety of blue gum. It is true that these trees are now about forty-five years old, and are very large trees growing along the roadside; but even allowing for this fact, there is, nevertheless, a marked improvement in the wood over that of the best blue gum trees grown under similar conditions. It shrinks less, and more uniformly, and does not warp.

Living trees contain internal stresses. This is especially true of blue gum of diameters of two feet or less. The outer cylindrical layers of the trunk are in tension, the inner core being in compression. This is by no means a merely nominal phenomenon, but is so marked as to form a serious defect in the tree for lumber purposes, even if the wood were suitable in all other respects. It would appear that this distribution of stresses in the trunk of the tree is a natural adaptation for the purpose of strengthening the long, slender trunk against the bending action of the wind. Such would be the result of a distribution of stresses in a wooden beam in this manner, since the tensile strength of wood is about treble that of the compressive strength. The great height of these trees, from 110 to 130 and even 170 feet, and their great weight make an enormous bending moment at the base in heavy winds. Large trees almost invariably show what appear to be compression failures and consequent distortion of fibers in the root swelling at the base. The tops of trees in a strong wind have been observed to bend over at an angle of forty-five degrees.

The effect of these stresses is evident in many ways. When the tree is felled, it immediately checks on the end of the log, beginning at the pith and running out radially. It usually splits in this manner into quarters. These checks are in no wise due to drying or to the process of filling, but entirely to the stresses referred to. As soon as the trunk is cut across, the equiliberating forces are severed, and the outer tension and inner compression open up the ends. These checks extend inwardly but a few inches at first, but gradually extend further as the adhesion of the fibers transversely gradually yields to the tendency to bend outwards.

These checks cannot be gotten rid of by sawing the end of the log off, for as soon as this is done, new checks are produced at the cut section. One of the most striking proofs of the existence of these stresses is found in sawing a thin board or veneer directly through the center of the log. This strip buckles up along its center and is taut on the edges.

Aside from the checking, these stresses produce another serious result. When the green log is sawed into planks or timbers, the stresses cause the pieces to spring out from the saw, and they will always retain this curved shape unless straightened by force. Veneer cut from any portion of the log will be dished all along the center with taut edges. A board sawed diametrically through the center of the log has been observed to open up at the two ends, and spring clear in two along the heart as it leaves the saw. When the timber subsequently dries, these effects are accentuated.

Trees three feet and over in diameter are nearly or entirely free from these internal stresses, except for the region near the heart. Consequently, one of the main difficulties of using eucalyptus is absent when very large trees are utilized.

The first part of the problem of utilizing blue gum for lumber is evidently not a question of drying, but of obtaining wood while green suitable for drying. Numerous experiments were therefore made in an attempt to overcome the stresses in the green logs. Whole logs were boiled and steamed in various ways and for different lengths of time. Three days' steaming at two or three pounds gage, followed by cooling under water, eliminated the internal stresses, but so softened the fibers that the toughness of the wood was destroyed and the wood checked in drying in a multitude of very fine checks. It was finally concluded that such attempts were futile from a practical standpoint.

Opportunity for Hardwood Flooring in England

A recent consular report states that the use of hardwood flooring in London is insignificant when compared with the use of softwoods. Hardwood is used to some extent in dance halls, skating rinks and in private houses where much entertainment and dancing is given, but even in such cases the flooring takes the form of parquetry rather than the hardwood flooring so widely used in America. The hardwood for English flooring is derived chiefly from the United States and Canada.

It is believed that hardwood flooring will be used more generally in London partly because of its sanitary features and also because of its beauty and the ease with which it can be cared for. It would seem that big manufacturers of hardwood flooring in the United States would find a very profitable market for this material by pushing it in the big markets abroad.

Railroad Income Still Unsatisfactory

A recent pamphlet of the Railway Business Association demonstrates that the income from the railway systems of the country is still below that of 1910. According to the pamphlet the railroads are still short of income and short of facilities. The pamphlet is made up of two sections, one being devoted to income and the other to facilities.

Speaking of income, the report says that the current monthly reports of railway revenue and expense, if studied in the light of 1910 expenses, will afford business bodies important guidance in adopting an attitude toward the proposed advances in eastern freight rates.

The Interstate Commerce Commission expressed the hope two years ago that the roads would increase their income without any advance in rates, and accordingly denied the advance. Since then complete statistics have been published for 1910, 1911 and 1912, which show that operating revenue was 1.4 per cent larger in 1911 than in 1910, and 2 per cent larger in 1912 than in 1911. Yet the corporate income available for improvements, and similar outlays was 20 per cent less in 1911 than in 1910, and 15 per cent less in 1912 than in 1910.

The railroads attribute this decrease in net income to rail operating expenses, taxes and the debit which arises from balancing non-operating receipts against non-operating expenses, chiefly interest.

One of the strongest reasons advanced by those publishing the report for the insufficiency of the railway income in the past years is the fact that the bond-buying public is turning away from railroad securities to securities of other corporations because the latter can raise their selling prices at liberty, while railroads' rates are fixed by law. This is proven by the fact that new capital issues of steam railroads listed on the New York Stock Exchange were, in 1912, the smallest in ten years, while new issues by other corporations were the largest of the decade.

The report comments on natural impressions formed by the general public based on the decrease for the fiscal year of 1913. It says that some business men have asked whether the earnings of 1913 did not meet the situation and render an advance in rates unnecessary.

The bulletin points out that an inexperienced observer jumping at conclusions may find, or think he has found, that operating income for the eleven months of 1913 as compiled, which operating income is figured at revenue less operating expense, less taxes, and amounting to $3,396 per mile of line, is substantially greater than one or another figure for eleven months of any previous year. From this fact the same observer might predict that as a result of the operations of 1913 the railway system has realized the income prophesied two years ago. The bulletin contends, however, that as a matter of fact these preliminary returns will not bear any such interpretation, for operating income has still to be cut down by large deductions not yet reported, and estimates computed upon actual deductions used in obtaining final figures in previous years tend to show that net corporate income in 1913 did not rise to the level of 1910.

In order to show the entire unsafeness of endeavoring to predict preliminary deductions based merely on gross operating revenues, the report outlines the various deductions which would have to be allowed for. The computer starts with a gross operating income of $3,396 per mile for eleven months among the roads included in the report. These roads are those having $1,000,000 or more operating revenue, which are the most prosperous of all the roads. When the poorer lines are averaged in for the ultimate statistics this amount is greatly pulled down. For instance, in 1911 the larger roads reported average operating income per mile as $3,058 for eleven months. The ultimate figure for all the roads proved to be $163 less.

Nobody knows how many miles of line will be included in the ultimate statistics for 1913. The average annual increase in mileage operated from 1908 to 1912 was 2.09 per cent. If this happened to be the precise rate of increase in 1913 the mileage operated would be 255,611.13. If the mileage omitted from the income account should be in the same proportion to the total mileage operated as in 1910, or 1.6 per cent, the mileage to be considered would be 251,521.36. Operating income at $3,216 per mile would be $808,892,693.76, or an increase of 5.5 per cent over 1910.

Sums deducted from revenue after payment of operating expenses are considered. Of this the biggest item is interest on funded debt. For instance, new investment is made each year in each plant. Nobody knows exactly how many miles of track there are, nor does anybody know the aggregate tractive power of locomotives in 1913. The enlargement of freight car capacity is another unknown factor. This investment in track of rolling stock, together with investment in steel passenger cars substituted for wood, safety devices installed, grade crossing eliminated, roadbed and bridges rebuilt, grades and curves corrected, terminals improved and extended, have together created new charges against income, a large part of which is obligatory interest on funded debt. According to the bulletin it will take two years or so to determine exactly the increase in fixed charges.

Thus the report goes on to say that the prophesied increase of income, if recorded past averages for new mileage, new cars, and increased locomotive tracting power hold good, has increased in 1913 to a loss in 1912 of 2.47 per cent. This occurs with an estimated increase of 33,901 miles of track over 1910, 293,331,000 more pounds of locomotive tractive power; 14,175,000 more tons of freight car capacity, and an increase of 7,900,000,000 tons of freight per mile.

The pamphlet points out the growing sentiment among big business men regarding the relations of railroad prosperity with the prosperity of business in general, and this is the reason for the publication of this summary in HARDWOOD RECORD. It says that prominent business organizations in St. Louis, Cincinnati, Philadelphia, Pittsburgh, Baltimore and other large cities have decided to either favor or not to oppose higher freight rates whereunder the eastern roads may provide better service. The report contains the plea that shippers consider that the resources of a railroad during the period of years are the average of the poor years and of good years together, and asks that action should be based upon the known past and not upon the half revealed present. It draws the word picture of the national calamity that might result in the midst of busy times brought about by congestion of terminals, throwing into idleness with their employes factories which could neither obtain raw material nor deliver finished product.

The section of the pamphlet treating of facilities tells what the shippers of the railroads are doing to minimize the necessity for further facilities, but emphasizes the fact that they can not possibly do enough. It says that with a net car surplus on August 1, 1913, of 58,455 and a decrease from that date to autumn low supply equal to the annual average decrease from August 1, 1908, to 1912, or 150,400 cars, the autumn net shortage in 1913 would be 91,945 as compared with 87,000, the previous record of 1907. This shortage would be aggravated by a severe winter into a great national calamitous congestion.

It is urged that all endeavor to do their utmost with the present transportation facilities, which are inadequate to take care of the peak of the load.

Commerce Court Abolished

The long drawn out controversy regarding the Commerce Court has at last been concluded by the vote of the House of Representatives, which passed the urgent efficiency bill with the right of abolishing that court, and the Bartlett amendment which removes the offices of the judges of the Commerce Court.

While it has been entirely evident that this would be the final culmination of the controversy, it is beyond question one of the biggest blunders made by any congress. It was frankly predicted by one representative who advocated the continuance of the court that the Democratic congress would be forced in two years to put into effect a similar body whether it carried the same title or not.

New Farmers' Alliance Needed

ARTICLE THREE

The farmers of this country suffer a large annual loss by failure to shelter their live stock. The amount of this loss, like the loss from rotting crops, is difficult to estimate because figures have not been collected, and from the nature of the case cannot be collected with any degree of accuracy.

It is remarkable that the value of the domestic animals in the United States happens to be almost the same as the value of the farm crops. Each varies from year to year, but the differences between the two classes of the agriculturist's wealth are comparatively small. The value of the farm crops in 1909 was $5,487,000,000, and of farm animals, including domestic animals not on farms, the year following was $5,461,535,136. Some of the leading items which made up the total for 1910 were the following:

Poultry	295,880,190	Value	$ 154,663,220
Cattle	61,803,866	Value	1,499,361,799
Hogs	58,185,676	Value	399,338,308
Horses and mules	24,148,580	Value	2,535,600,900
Sheep and goats	55,362,986	Value	245,811,658

More than half a billion dollars' worth of domestic animals are not on farms. Most of the animals in this class are horses and cattle kept in cities and villages, and they cannot be considered as belonging on farms, and they are not included in the above table.

It is a matter of interest, though not of much importance and not particularly pertinent to this investigation, that the value of ostriches in the United States in 1910 was $1,696,220. The average value of an ostrich is three times that of a horse.

In many parts of the United States farmers have long been accustomed to neglect their four-footed property. Horses, cattle, sheep, and hogs have been left to find what shelter they can in time of storm, and very often with little other feed than what they can pick up in bleak woods and snow-covered fields. In the early years of settlements it was often difficult to do otherwise, because the pioneer farmer was frequently hard put to it to shelter and feed his family, and was obliged to leave his domestic animals to shift for themselves. It is not the long ago, however, that is now under consideration, but the present.

How much are farmers losing now through failure to properly shelter their live stock? The neglect is nationwide and varies in degree with the different parts of the country. Many farms house all their animals, as they house all their forage and grain crops, and all their agricultural machinery. These are the prosperous farms. They have perfected their alliance with lumbermen and are profiting by it; but there are thousands of other farms where the need of shelter is painfully apparent.

Most horses are provided with shelter in winter, particularly in the northern and middle western states; but it has not yet dawned on many a cattle raiser that he is standing in his own light when he fails to furnish his cattle with shelter. Agricultural colleges are doing much good by helping to break the custom of turning stock out in storms to shiver when they ought to be warm and asleep under roofs. The extra feed required to winter a bunch of cattle in the open would sell for enough to make a good start toward providing a shelter, to say nothing of the loss of flesh due to cold rains and pinching winds.

It is not necessary to quote figures on the feed saved and the weight gained when cattle are housed. Agricultural investigators have figured it all out, and they are making some impression on the farmers who are still set in their ways and who still do as their sires before them. The ordinary observer can note the apparent difference in prosperity between the farmer whose fields contain sheds and barns, and the one who leaves his cattle to huddle behind a fence for shelter from the north wind.

The city butcher can tell the difference between the stall-fed ox and the gristly steer whose humped back tells the story of his struggles with the January snows and the March rains. There is little comparison between the profits from the two sales. It costs more to feed the animal out of doors and little meat goes on his ribs to show for it; but every fork of hay consumed by the sheltered ox gives a return when the butcher buys the animal.

The same is true of hogs and sheep. They are pulled down by cold rains as cattle are. Farmers are beginning to learn, particularly in the case of hogs, that confinement in a pen is not necessarily shelter. There must be a roof to shed the rain and snow, as well as restraining rails and bars. The hog is as sensitive to cold as the horse, and he brings little profit to his owner if he is left to root and shiver in winter weather.

The only means of measuring the loss incurred by farmers by the neglect to house their domestic animals is by percentages. The differences are so great in different regions and even on adjoining farms that actual figures compiled in one instance would be no safe criterion for other localities. There is no question that in the worst cases, where neglect is most pronounced, the loss amounts to one-half of the selling price. From that it grades down to little or nothing in cases where the stock is housed in warm barns and is fed abundantly though economically.

Few investigators place the average loss due to the custom of providing no shelter for animals at much less than ten per cent of the annual value; but in order to be safe, let it be placed at five per cent. On that basis the farmers of the country are losing about $250,000,000 a year. The investment of less than half of it in larger barns and more shed room would save the other half and add it to the farmers' working capital.

Every dollar so invested would be a permanent improvement of the farm. The barns would not need to be built more than once in a generation, and if well constructed and properly cared for, the buildings will stand for a century, if not longer.

Thousands of farmers are not in need of this advice. They know their wants and have already taken action. They have ample sheds for all their stock, adequate barns for all their crops, sufficient cover for their tools and agricultural implements, and the result is visible in the farms' general tone of prosperity. But there are others. They are drifting along in the old way, trying to make ends meet and to squeeze some profit out of their farming operations; but the leaks are so great that success is always more or less in doubt.

These are the farmers who need a closer alliance with lumbermen. Such an alliance will place the farmers on the road which leads to greater prosperity. The increased value of the farm animals will soon pay for the roofs that shelter them. The response will be immediate. Every new and better barn built on the stock farm is an insurance policy which matures every year and pays premiums. It is the very best kind of policy, because it prevents losses and adds to the capital, while the ordinary policy is intended to do no more than repay actual losses, and it nearly always falls short of doing that much.

It may be summed up that the farmers of the United States might save not less than $600,000,000 a year by building more barns and sheds. They would effect a saving of $100,000,000 annually in agricultural implements; $250,000,000 in farm crops, and $250,000,000 in domestic animals. Every dollar put into such improvements will be a permanent, active investment, constantly yielding returns.

There probably will never be a better time to make these improvements than the present. Lumber of the kinds needed is now reasonable in price. It may be expected to increase in cost from year to year, for the tendency of values is upward, though it is not probable that the rise will be rapid. The actual records taken from the books of certain lumber companies who have been handling building lumber show that the rise in price of such lumber has not been nearly so rapid as has been the increase in cost of other building materials, but the farmer who takes steps at once to provide needed buildings will be making a profitable investment at an opportune time.

Cruisers Need Recognition

Editor's Note

In the old days in connection with the purchase of timberlands, first class timber was so abundant and commanded such a low price that a matter of a few million feet difference in the estimate of a certain stand did not cut much figure. However, with the increasing cost of stumpage and the decreasing quantity of good timber, purchasers and bond houses financing timber deals are insisting more and more emphatically that the cruises on which they base their estimate of value shall be absolutely reliable. This change in condition has led to a change in cruising methods and to the influx of a constantly greater number of scientifically trained cruisers who rely upon accurate calculations rather than mere eye work to determine the amount of standing timber on a given tract. There is still, however, a weak point in the structure of timber cruising business and it has to do more with the recognition of cruises than with the accuracy of the cruisers themselves. That is, a timber buyer or bond house has to rely upon the confidence he holds in the cruiser for the work rather than upon any association as a guarantee that the work is accurate. The following article gives the ideas of one of the foremost cruisers of the country, in which he advocates the formation of some association that will absolutely guarantee the accuracy of timber estimates. The idea, while fundamental in character, is basicly excellent, and HARDWOOD RECORD shall be very glad to receive the suggestions of others interested in this idea. Criticism or other comment is heartily solicited.

Lumber inspection is recognized by all lumber associations as an important branch of their activities. Their rules and regulations they consider the best obtainable. Their inspectors they consider the best qualified men in that line of work. By these rules and with these men the inspection of lumber is conducted in a business-like manner.

The inspection of standing timber is of at least equal importance with lumber inspection, yet rules or regulations governing this work are lacking, and through the negligence of the various associations the capable cruiser has no certain place to turn to for substantiation of his work. The owners of stumpage and the investors in stumpage are the most material losers, as is evinced by the number of lawsuits now pending where the amount of standing timber on certain tracts of land is the question in dispute. This state of affairs is brought about by the fact that at least fifty per cent of the men engaged in the business of cruising timber are not morally or mentally qualified to perform the service for which they are employed. A corps of competent cruisers acting for some central authority as a court of claims would protect the investor, the stumpage owner and the honest estimate, and further bring to light at once those men posing as timber estimators, who have kept this business one to be looked upon with suspicion.

The subject of timber cruising has never been properly considered by the various associations because in the past through low stumpage values, the subject lacked importance. At the present time the importance is evident but the frequent recurrence of the subject to individuals is lacking and as a result no action is taken. The timber cruising proposition rarely occurs in the ordinary run of business and while lumbermen generally know that to secure a reliable cruiser is difficult, they do not realize that they run a risk of employing a man who's cruise will show a discrepancy from the actual stand of three hundred per cent and that they are quite apt to get a man who will miss it fifty or one hundred per cent.

Why should a forest engineer engaged in the cruising of timber seek to agitate a question which will reduce the total volume of all timber cruising one half? Provided only one half of the present amount of timber cruising is necessary, the work must as a whole be better done and done in such a manner that a minimum amount of checking will satisfy all concerned. It follows that if the work is better done the better grade of engineers and cruisers must do it, and inasmuch as capable men are scarce a big reduction in the total amount of work done would not affect their business.

One method of bringing about this happy result through the various associations interested would be as follows:

The secretaries of the various associations might form a board, the chairman of which could assume control and be the leader of a corps of engineers and cruisers, these men to be the best obtainable and to act as a court of arbitration in the woods. The cost of this department should be carried by its patrons. Further, the chairman of this board should be empowered to issue licenses to all engineers and cruisers desiring to practice under association rules. Through the issuance of these licenses the board could control the personnel of the engineers and cruisers practicing under its rules and thus insure to the members of the associations competent and reliable stumpage reports. License fees would care for the cost of this work. A justified complaint should be followed with a revoked license. A set of rules should be formulated and published which would govern the grading of standing timber, limit the methods of cruising to certain acknowledged standards, and designate a standard rule for the computation of stand.

This suggestion is made with a thorough understanding of the forest engineers' side of the question. Conditions as they are stated can not be denied in fact, and, with something done in line with that which has been outlined, great good would unquestionably result. That there may be faults in the proposed method of accomplishing this good is quite possible, but all must stand united on the idea that for the benefit of the lumberman, the investor in stumpage, and the business of timber cruising, something should be done.

CLARENCE W. GRIFFITH, Forest Engineer.

Logging Conditions Around Memphis

The weather has been quite rainy throughout the Memphis territory recently, with a consequent interruption of logging work. The ground is now so thoroughly watersoaked that it will be impossible to do much in the woods for some days and the weather is still unsettled, with prospects for further rain. Fortunately lumber interests owning timberlands in this section have been pushing logging operations and have been moving their timber as rapidly as possible, with the result that the threatened stoppage of receipts leaves them in a comfortable position with respect to log supply for the immediate future. Timber receipts here for some time have been quite free by both water and rail and an official of a prominent concern identified with the handling of timber by rail is authority for the statement that the mills are in very good shape and will not suffer from the present interference with logging operations unless it continues for some time.

The Valley Log Loading Company says that it is operating three loading machines on the Yazoo & Mississippi Valley line of the Illinois Central system and one on the Memphis-Marianna cut-off of the St. Louis, Iron Mountain & Southern and that all of these are being worked at full capacity. Coupled with this good movement of logs by rail has been an increase in receipts by water. The river offers a very good stage just now and this is being taken advantage of by all whose timber is accessible for water transportation.

Conditions, from the standpoint of manufacturers, are improving and, with the broadening of the demand which is now indicated, owners of mills will put forth every possible effort to secure a full supply of timber. They realize that they are going to be pushed to prepare a large enough supply to take care of the demand now promised and they are already doing all they can toward getting out logs and guarding against any shortage in that direction. This attitude on their part leads to the belief that active logging operations will be resumed as soon as possible. An official of the Memphis Valley Log Loading Company is authority for the statement that the season promises to be exceptionally busy in log loading.

The car shortage has not yet materially interfered with lumber interests in any direction. There are some outside non-competing points where cars are somewhat scarce, but lumbermen are able to secure practically their full needs. The heavy rains have delayed the movement of the cotton crop and this, coupled with the lighter movement of timber, has prevented the shortage from becoming at all acute.

The Lumberman's Round Table

KEEPING TAB ON PILES

A southern hardwood operator, commenting on the necessity of tagging piles, told of an improved method used by his concern in that respect. Instead of simply tacking a tag on the end of a board, where the rain could hit it and where it could easily be torn off, he has had metal rims or frames provided and attached permanently to the foundations of the piles. The card showing the age of the pile, the quantity of lumber in the stack and other details is slipped into this frame, where it is given perfect protection, and is never lost or torn off. When the pile is taken down and a new lot of green lumber put up, the old card is slipped out and the new in.

"By having this information kept in a permanent, safe place," said the sawmill man, "and by following it up with a monthly inventory, we have constantly at hand a statement of the lumber in the yard, with its age."

MAKING THE STOCK LIST WORTH WHILE

A hardwood man who believes in making it as easy for the customer to buy as possible has been sending out stock lists recently which indicate his ideas in this regard pretty plainly.

Instead of having simply a list of the items which he has on his yard—he operates a large sawmill—he first lists the stock which is dry and ready to ship; and under another heading shows the green lumber, which will be ready for the user within sixty or ninety days. He said that frequently a customer wants an item which is green, and is glad to know that it can be delivered at a given date.

In addition to this, he quotes prices f.o.b. the mill on his stock, and gives the rate from the mill to leading markets. Not content with this, he shows the effect of the rate on the price of the lumber by converting a fifteen-cent rate, for example, into dollars-per-thousand on each wood, so that the buyer can easily refer to his particular market and get the price on any item quoted.

The result of this plan has been all that could be wished, and has made the stock-list really worth while as a silent salesman.

ABOUT CUTTING STAPLE THICKNESSES

"The sawmill man who cuts more than staple dimensions," said a successful operator in the hardwood field, "is, in my opinion, showing a lack of judgment. Take plain oak, for instance. It is my policy to cut nothing but inch, unless I have an order for some other thickness.

"You hear a good deal said about the fat prices often secured by manufacturers who have thick stock to offer. Well and good; they have to be mighty big to pay the additional expense of handling that stock. The sawmill which is cutting half a dozen different thicknesses of the same wood never has a good-sized stock of any one dimension; and it is further put to the trouble of waiting a longer time for the thick stuff to dry before it is ready for the market. Then comes a long wait, usually, before the buyer can be found for the material; and if he doesn't pay a round price for his material, the lumberman has simply lost money.

"My plan is to cut staple dimensions that are readily salable. Then I know that I will not have to tie up a lot of money in stock that is either drying unusually slowly or can't be sold within a reasonable time after it is put on sticks."

HICKORY A DIMENSION PROPOSITION

Hickory seems to be at least one wood which has been put on a dimension basis almost altogether. This is indicated by the fact that handlers of lumber have found the demand for hickory stock to be unusually slow. Investigation has shown that a good many of their former customers are now getting most of their material cut to size, so that they can use it with a minimum of waste. In view of the fact that hickory is getting to be a scarce commodity—in spite of the rather large piles which are stacked up on a good many yards—this method of handling the material appears to be the proper one.

Handle men buy their stock cut to size, and wagon manufacturers, who are among the largest users of the material, are likewise getting the dimension idea. After the hardwood men have held their thick hickory on their yards for a few more years, and have thought the matter over, the chances are that they will decide to market their stock on a dimension basis.

LOW PRICE SOMETIMES A PROTECTION

One of the worst things that can happen to a wood, from the standpoint of its continued use, is an occasional rise in price which makes it too expensive for the consumer to handle. Poplar is a good example of this, for it has been the victim of more general substitution, perhaps, than any other wood.

Ash is an illustration just at present of the way the thing works. This wood has been in excellent demand throughout the year, and prices have been consistently high. The strength of ash has been better maintained, probably, than that of any other wood on the hardwood list, and a good many manufacturers thought that they were going to be able to "clean up" on the wood this year.

During the past month or two, however, it seems that a reaction of some sort has made its appearance. Those curious enough to inquire as to the reason for this, learned that users of ash for coach work and other purposes have been resorting to hard maple and some other similar woods as a means of avoiding the necessity of paying the high prices demanded by those having ash lumber to sell under previous conditions.

This may cause prices to decline sufficiently to make it to the interest of consumers to return to ash. But that illustrates the point that abnormally high prices are in a way a menace to the security of a given wood's position.

BRINGING WALNUT BACK INTO FAVOR

If walnut ever comes back into general use on this side of the water as a cabinet wood, it will be because furniture manufacturers and others use an entirely different method of finishing from that which was employed when walnut was a popular material.

This idea was made perfectly clear when the writer happened to see an odd suit of walnut furniture, made up in a southern factory to the order of the customer. It was finished as it used to be in the "good old days," when a high polish and lots of varnish were used, with a resultant appearance that was cheapening and altogether undesirable.

A lot of people who have unearthed old family furniture and restored it to use have made their walnut pieces things of beauty by having them scraped and the wood finished in its natural color, and rubbed dull. Finished in this way, the quiet but nevertheless effective beauty of the wood is apparent to everybody, and makes the monstrosities formerly perpetuated in the finishing-rooms of the furniture factories appear to be an entirely different proposition—as they really are.

Perhaps the supply of walnut is not sufficient to permit a real market for it to be created in the furniture trade; but if there is, the popular fancy must be won by showing the wood as it really is, instead of finishing it in a way that destroys all possible chance for its natural beauty to impress the observer.

DID YOU EVER SEE PERSIMMON FURNITURE?

A Louisville hardwood man has a table made of quartered persimmon which is probably one of the handsomest pieces of woodwork to be found anywhere. In figure the wood is simply astonishing, and has Circassian walnut looking like a pale imitation. It has rich yellow and black coloring, which, when properly matched up, as in this case, gives the appearance of a tiger skin inlaid somehow into the top. It is a pity that there is not enough persimmon available to enable the veneer manufacturers of the country to market it in sufficient volume to establish its position in the trade. If there were enough of it, it would be easy to assure it unlimited popularity, because with its bizarre and striking figure it would capture the public by storm.

WORMY CHESTNUT AND PANEL-MAKING

It is one of the old superstitions, to use a rather harsh word, of the panel trade that wormy chestnut is best for corestock in panel work because of the fact that it contains worm-holes. A leading panel manufacturer, who has studied the scientific side of the business as thoroughly as anybody in the trade, laughingly remarked that while a lot of the boys in the glue-room believe that wormy chestnut would be used regardless of price, he would willingly turn to some other grade if wormy chestnut went up too far.

"As a matter of fact," he said, "the worm-holes have nothing whatever to do with the efficiency of the wood for corestock. If the glue had to depend on the holes to get the proper cohesion, I'm afraid the panel-makers would have their troubles. The fact that we get equally good results when other material is used for various purposes demonstrates the fact that the incidental defects make no difference one way or the other."

Wood Imports and Exports

The July imports and exports of forest products for the United States, according to figures published by the Department of Commerce, are as follows:

Imports: Briar root or briar wood, and ivy or laurel root, $21,961; cedar 526,000 feet, value $30,086; mahogany 3,279,000, value $266,476; all other cabinet woods $147,134; logs and round timber 17,265,000 feet, value $183,994; pulpwood 124,757 cords, value $882,159; rattans and reeds $54,022; all other unmanufactured wood $1,338; lumber 88,585,000 feet, value $166,478; laths 61,728,000, value $189,706; shingles 41,364,000, value $106,440; all other lumber $121,828; chair cane or reed, $49,093; furniture $58,231; wood pulp 80,591,447 pounds, value $1,264,860. Total wood and manufactures of wood $5,417,460.

Exports: Hickory logs 464,000 feet, value $15,401; oak logs 39,000 feet, value $1,520; walnut logs 869,000 feet, value $40,741; all other logs 13,659,000 feet, value $265,648; firewood and all other unmanufactured wood $18,382. Hewed timber 4,067,000 feet, value $126,959; sawed timber 45,414,000, value $930,347; lumber, cypress 1,167,000 feet, fir 61,268,000, gum 13,265,000, oak 25,172,000, white pine 4,675,000, longleaf pine 81,852,000, shortleaf 1,767,000, all other pine lumber 26,190,000, yellow poplar 2,653,000, redwood 5,033,000, spruce 2,591,000, all other lumber 29,420,000; total lumber 255,153,000 feet, value $6,796,825. Joist and scantling 1,029,000 feet, value $19,584. Railroad ties 693,653, value $321,824; shingles 12,499,000, value $26,576; box shooks 935,365, value $97,807; all other shooks 79,435, value $169,192; staves 9,849,945, value $854,297; heading $27,442; all other cooperage stock $294,384; door, sash and blinds, $91,169; furniture, $481,849; empty hogsheads and barrels $43,833; trimmings, moldings, and other house finishings $80,488; incubators and brooders $8,683; woodenware $38,332; wood pulp 2,152,608 pounds, value $43,699; all other manufactures of wood $593,443. Total wood and manufactures of wood exported in July $11,447,360, being $1,231,895 more than for July, 1912.

It is interesting to note the destination of the leading forest products exported from the United States. The figures which follow are for the month of July, 1913.

HEWED AND SAWED TIMBER.

Destination	Quantity, feet	Value
France	3,813,000	86,110
Germany	3,339,000	67,830
Italy	5,599,000	102,861
Netherlands	4,228,000	97,388
United Kingdom	26,537,000	561,291
Other Europe	3,609,000	60,656
Canada	3,463,000	118,560
Mexico	198,000	3,096
Argentina	105,000	1,600
Other Countries	795,000	16,849

LUMBER.

Belgium	4,324,000	150,437
France	3,601,000	93,751
Germany	8,497,000	244,065
Italy	4,885,000	111,815
Netherlands	11,215,000	310,334
United Kingdom	47,618,000	2,188,192
Other Europe	5,884,000	152,781
Canada	52,154,000	1,241,931
Central America	6,789,000	145,912
Mexico	10,163,000	214,910
Cuba	13,594,000	256,382
Other West Indies	6,352,000	146,831
Argentina	15,969,000	389,572
Brazil	8,966,000	233,276
Other South America	15,816,000	268,788
China	7,033,000	85,506
British Oceania	19,297,000	342,348
Philippine Islands	1,395,000	17,921
Africa	3,281,000	78,987
Other Countries	9,349,000	142,670

FURNITURE.

United Kingdom	38,271
Other Europe	48,162
Canada	121,892
Central America	26,391
Mexico	27,017
Cuba	63,846
Argentina	63,695
Brazil	4,923
Other South America	29,002
Asia and Oceania	34,825
Other Countries	30,025

Effect of Electricity on Trees

Last spring the electric railway company of an eastern city saw fit to change the polarity of its current. Instead of sending the current through the trolley wire and back through the rails as is usually the case, the direction was reversed. About two weeks afterward complaints began to pour into the office of the superintendent of trees that many of the finest shade trees were dying. In each case it was found upon examination that a feed wire with defective insulation was in direct contact with some part of the living tree. As this condition had existed for an indefinite time without apparent damage to the trees the natural concluson was that the direction in which the current was passed was responsible.

As soon as this conclusion was reached systematic effort was made to protect all trees endangered. In some cases the wires were shifted, in others small limbs were cut off; in still others, however, the insertion of a tarred board between the living wood and the wire was tried. The latter proved defective as an insulator for so strong a current and a double board with porcelain insulators between was necessary.

In the meantime over one hundred fifty valuable trees were either killed outright or damaged beyond recovery. The railway company admitted responsibility for the damage and has paid out over $1,500 in settlement of claims. It has recently decided to change back to the old system, not, however, because of the danger to the trees, but because of an increase in hazard to its own employes under the new method. There is at least one other instance known where a change in direction of current caused much damage before it was discovered and corrected. It seems safe to predict that wherever such a change is made the death of all exposed trees will follow.

The explanation of this phenomenon is not definitely known. One theory is that the current causes salts of copper to be deposited into the living tissue with poisonous effect . Another is that there is a general disturbance of the root system due to the current which escapes into the ground and causes electrolysis. Still another is that the damage results from the actual burning of the living tissues by the current. Whatever the correct explanation may be it is known that the effect of the current is deadly unless prompt action is taken.

Conditions with the Railroads

It is generally recognized that business with the railroads of the country constitutes a very reliable barometer of general trade conditions. Hence, information coming directly from the heads of the various big systems of the United States can well be considered as reliable to the extent to which these statements express opinions of conditions in the business world the country over.

The Railway and Engineering Review of Chicago, with an idea of forming an analysis of such conditions, recently addressed letters to the presidents of all the big systems throughout the country. HARDWOOD RECORD takes the liberty of reproducing some of these letters, the majority of which contain a very optimistic tone regarding the remaining months of the calendar year 1913, but are rather doubtful as to business after the first of the year.

The letters follow:

We expect to have the same or greater gross earnings the balance of this calendar year than last year. We do not think the banks in the West are loaning very freely for the purpose of carrying grain in storage and this will hasten its shipment. The Northwestern has a very good grain crop indeed, and I think our line is better in this respect than any other western road. We have suffered some loss in Nebraska, but not great. Our general business also promises well. After the first of January I think it is somewhat speculative as to volume of business.

W. A. GARDNER, PRESIDENT CHICAGO & NORTHWESTERN RAILWAY.

The prospects of railway business during the remainder of the calendar year though the territory which the Norfolk & Western Railway traverses looks very favorable. As beyond the period of time referred to, the indications are not so favorable, and we anticipate a marked reduction in railroad business due to the uncertainty in the minds of inventors and manufacturers as to the result of the proposed tariff bill, income tax bill and currency bill.

L. E. JOHNSON, PRESIDENT NORFOLK & WESTERN RAILWAY.

I am of the opinion that prospects for railway business in the territory tributary to this railroad during the remainder of the calendar year are excellent.

W. K. NIXON, RECEIVER AND CHIEF OPERATING OFFICER, ST. LOUIS & SAN FRANCISCO RAILROAD.

With the uncertainty still existing as to the outcome of the corn and cotton crops—though the latter at the present writing promises a very good yield—and the unsettled feeling of merchants and manufacturers as to how they will be affected by the pending tariff and currency legislation, we cannot at this time predicate with any degree of surety the business conditions for the latter months of the year.

With the exception of some parts of the West, where the corn crop has been injured by the drouth, an optimistic feeling as to the future business generally prevails. On the whole we look for a fair business, as we hope to make up by an increase in the shipment of other commodities any shrinkage there may be in the corn movement.

B. F. BUSH, PRESIDENT MISSOURI PACIFIC, DENVER & RIO GRANDE AND WESTERN PACIFIC.

I look for quite prosperous business in the Northwest. Last year we had a very large crop, and this year a good crop, and there is nothing to hamper the continuance of good business that I can see.

E. PENNINGTON, PRESIDENT MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RAILWAY.

On the basis of traffic now moving in the territory served by our lines and the opinion of those engaged in such traffic with whom we come in contact, the revenues of the railroads are going to be large during the remainder of the current calendar year. The difficulty of the railroad situation is not in revenues, for they have steadily increased during recent years on practically all representative railroads in the United States, but it lies in the dangerously narrow margin between revenue and income—what used to be called "net"— because expenses have increased in greater ratio than revenue. The need of the railroads today is to widen this margin.

FAIRFAX HARRISON, PRESIDENT CHICAGO, INDIANAPOLIS & LOUISVILLE RAILWAY.

Wheat crop in our territory was fair and is about half moved out. Corn crop badly damaged by heat and drouth. Cotton is in fair shape at present as an average but badly burnt in spots and liable to still further damage in default of rain very soon. Fruits and small crops were generally good. Citrus crop on Pacific coast promises fairly good recovery from freeze of last year, and unless we get a repetition of that calamity should give fairly good movement, though not normal.

On the whole railroad prospects are fair except for drastic, unintelligent legislative, congressional and official acts. Nothing the matter with us but too much politics.

E P. RIPLEY, PRESIDENT ATCHISON, TOPEKA & SANTA FE RAILWAY SYSTEM.

The crops have been very seriously damaged in Missouri, Kansas and Oklahoma, and the cotton crop in Texas will not be more than seventy-five per cent of last year's, if that. Just what effect this will have upon the movement of general business, I am unable to say at this time, but I look for quite a large decrease in the movement of traffic during this fiscal year. We may perhaps be able to make reasonable returns for the balance of the calendar year, but after January 1st I look for a very light traffic throughout the Southwest.

C. E. SCHAFF, PRESIDENT MISSOURI, KANSAS & TEXAS RAILWAY.

Mr. Willard, in commenting on the general business conditions of the country, after making an extended inspection of the Baltimore & Ohio lines, has stated that he found them generally healthy; and while the volume of business for the coming year might not be as great as last year, he considered the situation to be satisfactory.

JAMES S. MURRAY, ASST. TO PRESIDENT BALTIMORE & OHIO RAILROAD.

With the corn crop failure in Kansas and southern Nebraska, the outlook is not comfortable with our lines in that territory. In northern Nebraska we will have about forty per cent of a normal corn crop. Our business will be reasonably good in Colorado, Wyoming, Utah and Idaho. It looks to me as if we are having a recession in business, from which we will not recover within a few months. Political and financial disturbances always produce recession instead of stimulation.

A. L. MOHLER, PRESIDENT UNION PACIFIC AND OREGON SHORT LINE.

The outlook for business during the remainder of the calendar year is good. The bituminous coal trade, which comprises seventy per cent of the tonnage of this line, promises exceptional activity. Because of the greater cost of operation and maintenance, due to the increases in wages and cost of material, the roads will not, unless they are enabled to increase their rates, be able to improve their net earnings.

M. J. CAPLES, VICE-PRESIDENT CHESAPEAKE & OHIO RAILWAY.

We anticipate a large crop of sugar cane and an unusually large yield of rice in Louisiana. The cotton crop in Texas, which promised to be as large as last year, has been impaired by the recent drouth and damage by boll weevil.

The deciduous fruit crop of California is not as large as last year, but the orange crop promises to be almost as good as the average. The demand for lumber has somewhat diminished, both on the Pacific coast and in the Southwest, and general business reflects a conservatism which is doubtless due to the scarcity of money and a desire to await the outcome of tariff legislation and a realization of the crops. Merchants are not overstocked and will therefore be in a position to purchase freely when existing uncertainties shall have been cleared away.

JULIUS KRUTTSCHMITT, CHAIRMAN SOUTHERN PACIFIC COMPANY.

Wood Interests Defend New York Code

The hearing before the building committee of the board of aldermen of New York City on provisions of the proposed new code covering the use of wood trim, showed the weakness of the case of the metal trim interests more than anything else. The new code as originally drawn would exclude wood trim from all buildings over one hundred feet high, and exponents of metal trim are in favor of it.

The committee when drawing up the new code had in mind only the question of reducing the fire hazard and it was for the opposing interests to show whether or not the old code did not sufficiently cover this item. The metal trim men read a lengthy statement dealing with generalities and did not show their product to be a fire-resisting material superior to wood under similar conditions. They claimed, for instance, that the loss of life in the famous Triangle shirtwaist fire would have been lessened if the building had been trimmed with metal. This is ridiculous on its face for everyone knows that the building was not equipped with sufficient fire escapes and the victims could not get out, while the rapid spread of the flames was due entirely to the materials used in the manufacturing business and not because of the construction. The metal men avoided the item of cost which is admittedly in favor of wood. It was shown that oak doors in any quantity could be furnished erected at $17, as against $40 for steel doors. The wood trim interests argued that since it has not been shown that the use of wood trim increases the fire hazard it would be a great injustice to force builders to install metal trim and doors at a cost running from three to five times that of wood. There is no popular demand for metal trim in hotel and apartment buildings, while wood is greatly superior because of its artistic features and lasting qualities.

The wood trim interests were well represented and there was a good attendance of lumbermen. It is confidently expected that the code will be modified leaving the trim provisions as now in force with respect to hotel and apartment buildings.

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The Hoo-Hoo Meeting

The annual meeting of Hoo-Hoo closed at the Hotel Planters, St. Louis, on Sept. 11. The meeting was one of the largest ever held, there being a record attendance of approximately 500.

The invocation was delivered at the first day's session by Rev. John B. Gonzales.

Hon. H. W. Kiel, mayor of St. Louis, delivered an address of welcome, which was responded to by Frank W. Tower of San Francisco, snark of the universe.

Julius Seidel of St. Louis then extended the welcome of the Lumbermen's Club of St. Louis to the visitors.

Following the talk of Mr. Seidel, W. A. Hadley, high priest of the Osirian Cloister, responded.

Frank W. Trower then delivered his annual address which was full of interest. He referred in his talk to the recent dismissal of the action of the government in the anti-trust law against the secretaries of the different lumber associations. Mr. Trower said that when the suit was first brought, several years ago, the lumbermen were at first amused and then indignant over the perversion of the power of the government. He said that every intelligent lumberman recognized that there was no foundation for the suit under the anti-trust law, which was really enacted to save the small business man from ruination at the hands of the monopoly. According to the speaker, all lumbermen knew that the various associations were formed for legitimate purposes of trade betterment precisely as all other lines of business organizations. The lumber associations also aim to resist the unscrupulous competition and the insidious attack of the mail-order houses.

The general public evidently did not know of these facts, and the lumbermen demanded that the government show proof. The dismissal of the cases shows that the government never had a case which would justify this surrender to the clamor of the professional politician.

In speaking of the pending Panama exposition, Mr. Trower said that the Lumbermen's building and the house of Hoo-Hoo, will be beautiful and hospitable. The committee having charge of this work has already selected a site and plans for the building. It is expected that the various woods of the country will be advantageously displayed in this structure, and also that the building will be a welcome haven of comfort and rest to visiting lumbermen.

Following the snark's address and the appointment of committees, the scrivenoter delivered his report in which it was shown that 941 members were initiated last year as compared with 1,024 in 1912; 1,176 in 1911; 1,455 in 1910; 1,800 in 1908, and 2,460 in 1907. The number of deaths last year were 152, and of resignations, 128.

In the twenty-one years that the Hoo-Hoo has existed there have been 28,005 initiates, of whom 1,391 are dead, 1,055 resigned and 12,910 suspended; 8,255 have paid dues for 1913.

The total receipts for the year 1913 were $23,334.80 and disbursements $26,690.57. This deficit covered obligations incurred prior to Sept. 6, 1912, and paid after that date amounting to $4,132.23. To this should be added a shortage of $3,199.85 in the imminent distress fund, and $1,768.80 advance dues received.

Mr. Stephenson said that the deficit of $3,355.77 is covered by notes which he has endorsed personally as an individual.

Regarding the imminent distress fund the scrivenoter reported that while the statement showed a cash balance of $3,199.85 there was no cash balance to the credit of the fund on Sept. 6, 1912.

Mr. Stephenson then submitted an additional report showing the work done by the scrivenoter during the past year. He followed that by a somewhat extended discussion of the various trade publications, in which he was frank in naming two publications that have not given particular attention to Hoo-Hoo during the past year. He also specifically mentioned a list of several trade journals that have given considerable space to Hoo-Hoo affairs, but apparently overlooked several publications which allotted Hoo-Hoo questions the necessary space whenever so requested, HARDWOOD RECORD being one of the latter.

The scrivenoter was followed by Chief Forester Henry S. Graves of the United States Forest Service. Mr. Graves talked on the present day phases of the conservation movement.

In the afternoon the visitors investigated the plant of the Anheuser-Busch breweries. Here they were treated to a very substantial luncheon and had a generally good time.

A concatenation was held in the dining room of the hotel in the evening, at which twenty-three kittens were initiated. The concatenation was conducted by the higher officers of the order. This was followed by a vaudeville entertainment and smoker for the men and other entertainment for the ladies.

Winnipeg, Can., was selected as the next meeting place of the order, that city winning out in the face of spirited efforts from the representatives from Waycross, Ga., and Nashville, Tenn.

The Hoo-Hoo in one of its business sessions determined to take the initiative in taking steps for the organization of bodies of lumbermen in the country for the purpose of organizing the Benevolent Association for aged lumbermen of the United States, which idea was inaugurated by John C. Spry of Chicago about six months ago. It was decided to appoint a special committee on this subject. To support the movement, George H. Grayson of the Graysonia-Nashville Lumber Company, Nashville, Ark., offered a tract of 100 acres of improved farming lands near his mill plant at that point. He later offered $5,000 in cash in addition, toward the proper equipment of the tract for the purpose intended.

Following is a list of the Supreme Nine as elected for the following year:

SNARK—John H. Kirby, Houston, Tex.
SENIOR—E. D. Tennant, Winnipeg, Man.
JUNIOR—J. Harry Ehrmanntraut, Seattle, Wash.
BOJUM—Charles S. Brace, San Francisco, Cal.
SCRIVENOTER—W. M. Stephenson, St. Louis, Mo.
JABBERWOCK—Charles H. Calhoun, Beach, Ga.
CUSTOCATIAN—P. T. Langan, Cairo, Ill.
ARCANOPLER—W. J. Woodward, Norfolk, Va.
GURDON—E. H. Lewis, New York, N. Y.

Tariff Bill Passes the Senate

On Sept. 9 the Wilson-Underwood tariff bill after fifty-four days of debate passed the Senate by a vote of 44 to 37. The Democratic vote was practically unanimous in favor of the measure. The final vote was a culmination of an all-day session in which a discussion was indulged in on various features of the bill and in which efforts, in many cases successful, were made to secure certain amendments. The bill as a whole effects a reduction in the tariffs, although in some instances higher rates are provided.

The members of the House of Representatives seemingly are not inclined to favor all of the Senate amendments, there being the opinion in some quarters that the Senate bill provides in substance for such radical revisions downward as would effect a serious shortage in the revenue derivable from dutiable goods.

The bill having passed in the House of Representatives will now go to conference before committees from the two branches of the government, and it is expected that the conference will continue for a week or two before a satisfactory basis has been arrived at.

The bill in general, when passed, will very likely conform very closely to the wishes of President Wilson, and whether it meets the economic needs of the country specifically or not, will surely demonstrate the power of the Democratic president.

A leading Memphis lumberman recently visited a big oak manufacturing concern in southeastern Ohio, whose officers solicited criticism. After a rigid observation he suggested that in piling oak they should be careful to keep the heart edges on the sides of the piles in, rather than exposed to the weather. By this simple expedient the hearts are much less liable to heart-shake. Furthermore, the heart, being much more apt to warp and check, will thus be kept in much better condition.

Some Pointers Concerning Glue

It is seldom that as much real information is delivered in so small a package as that recently sent out by J. A. Taggart, Toledo, O., in the form of an eighty-five page book on glue. The information is primarily for the user, and deals with selecting, handling, testing, and applying the article. It is, therefore, of interest to a large class of manufacturers of wood commodities.

The glue industry in America was founded by Peter Cooper in 1837. Its rapid growth began about 1880, at which time the annual output was worth $4,000,000. It is now worth $15,000,000. The capital invested in the business is not much short of $13,000,000.

Animal glue is a by-product of packing houses. The usual parts of animals of which it is made are hides, bones, sinews, tails, snouts, ears, piths of horns, tannery waste, shoe factory waste, and the waste of button and knife handle factories that use bone. Heads, tails, fins, bones, sounds, and other parts of fish are excellent materials for the glue factory.

The processes of nature do not make any glue: they simply provide the substances of which it can be made, and man's ingenuity has devised the methods of producing the completed article. The operation is not complex, although a number of important details had to be found out by experiments. The desired result is produced by the action of water and heat on nitrogenous substances. The details that must be learned relate to the amount of water, the degree of heat, and the duration of the process. After boiling there must be drying, and that must be carefully and skillfully attended to. The user of glue is not particularly concerned with the method of making—that is the manufacturer's business—but the user will be none the worse for knowing something about the manufacture of the article about which he is so greatly concerned.

The test of glue is in its use. There are grades and kinds, but when a man wants a glue for a particular purpose, the safest thing he can do is to try it out. Tests for determining quality are physical rather than chemical. The laboratory man with his retorts, acids, agents, and test tubes can find out many things, but they do not mean a great deal to the man who is desirous of knowing whether a particular glue will answer his purposes. He can make a number of tests for himself, provided he has had experience and knows his business. The quality depends largely on viscosity—the flowing qualities. The slower warm glue flows, other things being equal, the better it is. The rate at which water flows is taken as a basis of measurement. The jelly test is another method of determining quality. A light glass vessel is placed on the surface of warm glue, and the vessel is gradually loaded with shot, and note is taken of the rapidity with which it sinks into the substance: the slower the better, other things being equal. Some excellent judges of glue depend on the finger test. Nothing but long experience will make a man proficient in this process. The tip of the finger is pressed upon the warmed surface. The depth and the character of the impression furnishes a key to the glue's quality, but the interpretation depends on the knowledge and skill of the man who makes the test.

It is said that white bubbles, in the shape of round blots, on the surface of glue is evidence of decay. Bubbles may appear within glue—not on the surface—without being an indication of putrefaction. A good glue is smooth though not necessarily glossy. Sometimes the very best will be of a dull color. The surface should be uniform in color and appearance, but the color is not important as a rule. A thin piece of cold glue, if of good quality, will bend considerably before breaking, and this is one of a number of tests that can be easily made. High-grade glues never show glassy fractures, but bone glues do. If glue in solution is beaten with an ordinary egg beater and shows foam which does not quickly subside, the article probably contains impurities. Experts say, avoid using any glue that does not smell sweet and clean.

As much depends on right methods in the glue room—where the glue is used—as in the factory that makes it. In the first place, the waste is said to be fully twenty-five per cent. Glue should always be soaked in cold water before using. It should be thoroughly dissolved before heat is applied. Good glue will absorb from 150 to 250 per cent of its weight of cold water. Flakes should be soaked ten or twelve hours, ground glue from one to four hours. It must be thoroughly soaked, not merely moistened on the outside. Only pure cold water should be used; that from boilers should be avoided.

In heating glue, the heat should be applied indirectly, and should not exceed 150 degrees. The glue must not boil, and live steam should not be applied directly—it will ruin the glue. Vessels in which the substance is dissolved or warmed should be brass, copper, or aluminum, and the vessels should be frequently cleaned. Too much should not be melted at one time. It must be protected against dirt; too rapid evaporation; cold drafts, or a room too cold must be guarded against. All surfaces to which glue is applied should be warm and dry, but each situation must be individually considered, because the manner of applying is of great importance and rules which suit one case may not work well in another. Among rules laid down for the selection of glue are the following:

For wood joints use high test hide glues. They make strong, firm joints, which is extremely important since joints are subject to more or less tension; and they set rapidly.

For veneers take a moderately high test mixture of bone and sinew or bone and hide glue. The higher test glues set too quickly for this particular kind of work. If a spreading machine is used, avoid a glue that tends to foam. Sometimes foaming is caused by spreading too fast. Overheating glue also tends to foam it. This can be overcome by the addition of sweet oil, vaseline, paraffine, or wax candle, but it is objectionable when veneering.

Somewhat "Chestnutty"

Professor N. F. Davis of Bucknell College must have been misquoted in a recent interview on raising chestnuts. According to figures attributed to him there is more money in raising chestnuts than in any other crop that grows out of the ground, when cost is considered. It is stated that chestnut trees eleven years old average a bushel of chestnuts a year, "which sell readily for from five to ten dollars a bushel." That means from $559 to $1118 an acre per year from the crop. It beats ginseng or Louisiana lettuce. The professor figures on cutting the trees for lumber in "from twenty to thirty years" and getting another profit. What would any one want to cut trees for, if they produced from five to ten dollars a year in nuts? A thirty-year-old chestnut tree would sell for only a dollar or two as a pole or a few posts. Besides, trees that grow chestnuts in considerable quantity never amount to much as lumber, because only short limby trees bear chestnuts; tall ones produce only a few at the top.

Unless the figures of production and profit in the interview are accepted as a joke, there is danger that they will fool people into planting chestnut in expectation of returns which will fall about ninety-five per cent short of the estimate—as has been the case where the catalpa and the eucalyptus crazes have led gullible people to do foolish things.

Use for an Unimportant Tree

Efforts of enterprising furniture manufacturers in America to sell wooden bedsteads in India encounter difficulties which are explained by Consul Henry D. Baker in a recent report. Bugs eat up wooden bedsteads in that country. In America the bugs generally are satisfied by eating the sleepers, and leave the bedsteads. Why not try sassafras wood in making a sample lot of bedsteads for the India trade? If this wood's reputation is not founded on false pretenses, no insect will come near it.

Some Figures on Lumber Exports

Beginning with the year 1912 the Department of Commerce enlarged the scope of its statistics of export of forest products from the United States. Before that time lumber generally went simply as lumber without any subdivisions to show the kinds, as pine, oak, spruce, etc.; but last year somebody awakened to a realization of the fact that there are different kinds of woods passing out of the ports of this country to enter those of foreign lands, and that the business men of this country, and probably of others also, would be pleased to receive a few more particulars. The result was that what formerly had been lumped in as lumber is now separated into nine parts, as shown in the export statistics of 1912.

There were several subdivisions or classes recognized in the forest products exports before that time, such as round logs, hewed logs, sawed (square) logs, cooperage, and others; but plain lumber has long been the leading item in these exports, and it was listed as though it were a single species. Under the new arrangement this item appears in the 1912 report as follows, for the year closing June 30:

Species.	Value.
Longleaf pine (called "pitch pine")	$15,852,231
Oak	9,229,413
Fir	7,640,038
Gum	1,645,031
Yellow poplar	985,291
Shortleaf pine	824,366
Spruce	510,097
Other pine	6,580,689
All others	7,493,538
Total	$52,060,694

This subdivision is an improvement, but it lacks much of being complete. Yellow poplar is probably the only one on the list that is a single wood. What is called oak is made up of a dozen or more kinds of oak; some are white oaks, others are in the red oak class, but since lumbermen in this country do not pay much attention to the different species of oak, it would be impossible to separate them when they are presented for export to foreign countries.

Longleaf pine is the chief species exported as "pitch pine." That is a general name and is applied to no fewer than six pines of the United States.

Shortleaf pine doubtless represents two or three kinds, including loblolly. The name is used for a number of yellow pines.

Fir is a name that may properly be applied to the lumber of nearly a dozen different trees; but the fir listed for export is practically all Douglas fir cut in Oregon and Washington.

Spruce lumber is cut from red, black and white spruce of the northern and eastern part of the United States, and from Engelmann spruce of the Rocky Mountains, and Sitka spruce of the northern Pacific coast. Most of the export spruce is the red and the Sitka.

In comparing the forest products exports of one period with those of another, much care is necessary to make sure that the totals in each period consist of similar and comparable items, otherwise the figures will be misleading. Errors of this kind are apt to occur for the reason that one table of imports will contain certain raw materials or certain manufactured or partly manufactured articles which are not included in other tables. The table which follows has been constructed to make the figures for the seven years comparable as nearly as possible. Four kinds of material are included—hewed logs, sawed logs and heavy timbers, lumber as the term is usually understood, and joists and scantlings. For some reason the collectors of statistics prefer to group the commodities in that way. This does not include a number of forest products, like pulp, furniture, cooperage, shingles, etc. Exports listed in the table may be compared for the seven years covered by the statistics:

Commodity.	1906.	1907.	1908.	1909.
Hewed Timber	$ 877,776	$ 890,106	$ 1,316,465	$ 839,011
Sawed timber	10,649,310	13,101,178	11,040,677	8,414,519
Lumber	28,695,823	39,861,352	35,607,508	29,056,579
Joist and scantling	501,711	752,152	581,718	378,914
Total	$50,724,620	$54,604,788	$48,546,368	$38,689,023

Commodity.	1910.	1911.	1912.
Hewed timber	$ 825,192	$ 770,123	$ 644,129
Sawed timber	9,852,627	11,476,177	10,292,792
Lumber	36,774,219	43,756,177	52,060,694
Joists and scantling	507,853	520,358	577,075
Total	$47,959,891	$56,522,835	$63,574,690

The products represented in the above table are distributed to all the principal countries of the world. For example, the sawed timber for the years 1908 and 1912 was shipped as follows:

Destination.	1908.	1912.
Europe	$8,910,111	$8,847,471
North America	1,448,622	1,460,274
South America	188,308	124,281
Asia	10,928	336
Africa	105,310	260,330
Oceania	377,399	.....

It is thus shown, for this item at least, that the trade is not subject to much change. The four years from 1908 to 1912 did not greatly increase or diminish the exports to the chief markets. The total exports of forest products ("wood and manufactures of wood") for the year ending June 30, 1912, is shown below:

Europe	$37,896,687
North America	31,506,461
South America	14,811,867
Oceania	5,386,560
Africa	1,842,437
Asia	1,333,753
Total	$92,777,765

The exports to North America include those to Canada, Mexico, Central America, and the West Indies. Oceania is a general term including the islands in the Pacific ocean, the most important of which are Australia, New Zealand, the Philippines, and Hawaii. Most of the shipments to that region go from the Pacific coast. A list showing the total exports to all countries for a number of years is of interest for the purpose of comparison. While there has been a general increase, such increase has not been steady. The table below covers nine consecutive years:

Year —	Value of wood exports.	Year —	Value of wood exports.
1904	$60,955,120	1909	$64,540,573
1905	54,962,131	1910	74,920,958
1906	65,214,094	1911	87,701,832
1907	79,704,365	1912	92,867,764
1908	77,183,539		

America has always been an important source of lumber for export. The trade began more than 300 years ago, but figures for early periods are fragmentary. About one hundred years ago the government began keeping systematic records, though the method of keeping them has changed from time to time. In some instances totals only are shown, while at other times many details are included, such as the kinds of wood and the various destinations. Below is given an abstract of the lumber exports, by decades, for a century—that is, each tenth year, beginning with 1817, is given. The exports may not be entirely comparable in all cases, but they are generally so. The main items are sawed and hewed lumber and timber. Round logs are not usually included, though for some years they may be. Wholly manufactured articles, largely or entirely of wood, such as furniture, are not included in the following totals:

Year —	Value of wood exports.	Year —	Value of Wood exports.
1817	$ 3,498,144	1867	$14,838,574
1827	2,275,112	1877	17,884,156
1837	3,226,662	1887	18,613,656
1847	3,938,201	1897	35,679,694
1857	11,633,217	1907	79,704,365

While the United States has always been an exporter of forest products, it has been an importer also. Wood was imported into America about as early as it was exported. Common lumber was shipped to these shores from Europe long before the Revolution. Boards and planks sawed by hand by the old pit-saw method came to this country for house building at a time when every man here

had more timber on his own farm than he knew what to do with. Strange as it may seem, hand-sawed lumber came here from Europe many years after sawmills, operated by water power, were working near the Atlantic coast. Such are some of the strange freaks of trade.

Cabinet wood, principally mahogany, was an occasional import two centuries ago, and it has been coming ever since. Two principal sources and kinds of timber imports at the present time are mahogany from tropical America and tropical Africa, and various woods from Canada. The latter are the same kind of timbers that grow in the United States, for Canada has no tree species of importance that does not occur also south of the international boundary. Such lumber comes into the United States simply because it is convenient to markets that want it—not because it is better than lumber cut this side of the line. The increase of lumber and log imports has shown a gradual and fairly steady increase for more than forty years. The following table gives the figures by five-year periods from 1870 to 1890, and annually after the latter year. The record is a fairly accurate barometer of trade conditions during the period of compilation. For instance, a serious decrease is seen following the troubles of 1907 and again in 1908:

IMPORTS OF FOREST PRODUCTS.

Year—	Value.	Year—	Value.
1870	$ 670,131	1900	$ 5,961,456
1875	1,895,535	1901	6,950,123
1880	2,884,579	1902	7,587,901
1885	3,587,651	1903	8,294,963
1890	4,254,789	1904	8,429,218
1891	5,280,264	1905	7,880,746
1892	5,626,143	1906	8,931,114
1893	6,705,798	1907	11,471,595
1894	6,010,492	1908	12,500,487
1895	7,374,205	1909	11,455,143
1896	8,439,156	1910	15,176,506
1897	8,519,928	1911	14,475,198
1898	6,434,091	1912	14,271,416
1899	5,849,912		

Wholly manufactured products, such as furniture, are not included in the above statistics. It is supposed to be material intended for further manufacture, though some of it is doubtless used in the rough, just as it comes in. A comparison of imports and exports for certain years indicates that exports are increasing at a higher rate than imports. For example, in 1897 the exports were four times greater than the imports, while ten years later, 1907, the exports were seven times greater than the imports for that year.

The Trade Journal's Importance

It can not be said that the trade journals of the country have ever displayed undue egotism in suggesting to their readers the important part which they have played in the development of commerce and industry throughout the country. The growth of the modern trade journal has been gradual, just as has the modern business idea, and the publications' effect upon business has for this reason been more or less of an unseen factor. It will not be denied, however, by the student of business affairs that the modern American trade journal as a class has done a great deal to assist American industrial and commercial enterprises to their present high plane of development.

The eighth annual convention of the Federation of Trade Press Associations held at New York in September was replete with valuable papers of all kinds, most of them, however, having bearing directly upon the publishers' side. There were several which should be read with equal interest by the business man of the country who is merely a subscriber to, or advertiser, in some trade and technical publications. One of these talks is entitled "The New Force in Business," and was read by R. R. Shuman of the Shuman-Booth Company, advertising service agent of Chicago. His talk had such a direct bearing upon the relations of the modern trade paper to the business world that it is herein summarized in the hope that it will bring some of the readers of HARDWOOD RECORD to a realization of the great benefit to be derived from a closer relation between members of the trade which this publication represents and the various high-class journals endeavoring to advance the cause of the lumber business.

Mr. Shuman says that as periodical visitors to the desks, to the minds and hearts of the captains of trade and industry of the country the trade and technical journals yield a power far greater than that of the political press or of the pulpit, or of any other publicity force that now exists in this or any other country, because of the fact that the readers of the high-class trade journals are not made up of the idle and thoughtless multitude, but of the great five per cent of the population of the country which controls the labor and markets the product of the other ninety-five per cent. They are men who have built and are building America's industrial and commercial greatness, and according to the speaker the instruction and ideas given by the modern trade press have done more to put America in the forefront of the industrial and commercial nations of the earth than any other one influence.

As part proof of this statement Mr. Shuman suggests that it is necessary only to compare the primitive, wasteful, inefficient methods of store management and display, accounting methods and store equipment of fifteen years ago with the advanced methods which so largely prevail today. To give an index of the power of the technical journals it is necessary only to study the equipment and methods prevailing in manufacturing plants of today as compared with those of only a few years ago.

Of course, the force of a journal is directly proportionate to the intelligence and unselfishness with which each journal builds for others, while it is building for itself. In both the avenues of trade and of industry the various periodicals give each subscriber the benefit of the latest thought, the latest development of machinery or method which the most powerful organizations of the country have been able to devise. Under the old system of things the various short cuts and efficiency plans were held in monopoly by but a few of the largest manufacturers or merchants, but through the medium of the trade press these items have been given country-wide circulation and all are now enjoying the benefits. The result is in a broad way that the cost of production has been held down and hence ultimate cost of the article has not increased as greatly as it might have.

Mr. Shuman further states that the time has gone by when the trade press was the hanger-on in any trade or industry. The trade press on the other hand is now rather the leader which sails the seas of the various industries not as something towed behind but as the very engines that impel the industries themselves.

One of the most pertinent suggestions made in Mr. Shuman's talk, had to do with a question which has commanded the attention of the lumber press for some little time. He maintained that it is the duty of journals in any line of trade or industry to guide and inform the daily newspapers in centers important to the various trades or crafts, and the great national weekly and monthly magazines as well, so that there may be a marked decrease in the misinformation about trade and technical affairs which is so characteristic of the public press of the period. These efforts if persistently and intelligently followed up will ultimately, according to the speaker, win the public to the side of the industry it is defending, and thus give new force to that particular branch of business.

The talk contained some sane advice relative to the charges for advertising space. Mr. Shuman's remarks on this subject coincide very closely with the ideas of the majority of the trade press publishers, and also with the ideas of most of the progressive advertisers of the day. Mr. Shuman says:

"Your rate is your own estimate of your worth, a measure of your faith in yourself, your own dollar and cent estimate of your own right to live."

He says that he knows a publisher who charges considerably more per page in a paper of 4,000 circulation than is charged by a similar publication claiming 20,000, and that he finds that his business comes so easily that he is mighty particular about whom he admits at that price. This man, according to the article, has faith in his mission to his subscribers. On the other hand, it is the low rate and the special bargain paper which discredits trade and technical journals in the eyes of men who are accustomed to pay good prices for good goods in the expectation of getting money value for what they pay.

Altogether the talk embodies a great many ideas which could very well command the attention of most of the biggest merchandizing and other lines of trade throughout the country. The lumber business in its immensity, being the second largest industry in the United States today, should be vastly concerned with any new ideas in solving this problem of merchandizing which is becoming more and more difficult each year. Hence, HARDWOOD RECORD submits these few ideas in the hope that they will at least receive the attention of the trade which it endeavors to represent.

Locating the Trouble

In a recent address before the Society of American Foresters, R. S. Kellogg of Wausau, Wis., took this pointed text: "It is better to waste timber than to waste money."

He spoke on the subject of the future utilization of timber, and his text embodied his conclusion. He held that it is unreasonable to expect a business man to save scraps and low-grade timber when it costs more to save it than it is worth. A good deal of that kind of business has been done in the past, and he cited two instances where large operators marketed millions of feet of lumber at an actual and considerable loss. No one should expect the practice of conservation to be carried that far. To do so is not conservation at all, but waste.

The loss is in the low grades because the market for that stuff is poor. Box makers are the chief buyers, and they sometimes find it impossible to use it all, and the price drops very low. One of Mr. Kellogg's statements is worth careful thought. He says that when the price of box lumber advances, the business of the fiber box people increases. History, he says, has shown this to be the case. The question suggests itself whether a permanent advance in the price of such lumber would enable the fiber box people to capture a large part of the box business. A straw which shows the current of thought among shrewd business men is seen in the fact that a fiber board mill has just been completed in Wisconsin at a cost of $2,000,000. It is assumed that the builders of that mill expect to sell their product to box makers. The mill will use much waste, and will not draw heavily from the kinds of timber that now go into box lumber. This means that there will be as much low-grade lumber as ever, but part of the market for it will be taken by the increased output of fiber boxes. What is to become of the low-grade lumber? Are the sawmills to continue to cut it, in spite of the fact that it is better to waste timber than to waste money?

It is stated as a fact, established and proved by experience, that when the price of stumpage advances, it never goes back. When prices of standing timber are good, sales are made; when poor, the owners simply hold. This is true because the owners of timber are generally able to hold it. Taking this view of the situation, it is apparent that lumber's tendency is bound to be upward in response to increased cost of stumpage. If low grades are slow sale, or no sale at all, the profit (if there is to be a profit on lumber) must ultimately come from the good grades. Dreamers (not lumbermen) have told how the whole tree, from the root collar to the twigs, ought to be hauled to market in some way or other. That dream may come true sometime, but it hasn't yet. It is the height of folly to pile up supplies far ahead of demand. That would be wasting money to save timber, which, according to the text, is no economy at all.

Economy lies in the direction of increasing the demand rather than the supplies. The supplies are all right as they are; the weak place is in the sales end of the business. Mr. Kellogg strikes at the low place in the breastworks, and declares that the men with lumber to sell must adopt better business methods in advertising. They must create demand by pushing lumber in ahead of the substitutes which are taking the markets. Manufacturers of these substitutes are fighting by day and sleeping on their arms at night, and are taking market after market while the lumberman is following the tactics of the cross-roads merchant who sits on his store porch and waits for customers to come around. That method is out of date now. While waiting for the customers to drop in, the wide-awake competitor goes out, hunts up the customers, tells them what they want and sells it to them, while the merchant, sitting dozing on his porch, wonders why business is dull. The beginning of a new era in merchandizing lumber has already begun. It is to be hoped that the new idea will be pushed as vigorously as have questions concerning more efficient methods of lumber manufacture. The millman cannot quite adopt the policy of cutting to order in all cases, but he should try to work round to the plan of getting the order as soon as possible after he has the stuff with which to fill it. Printers' ink, used with judgment, not thrown away, will help mightily, Mr. Kellogg thinks, in connecting the man who has the lumber and doesn't want it with the man who doesn't have it but wants it.

Manufacturers Becoming Better Housekeepers

The constant menace of fires in industrial plants of all kinds, while a source of unceasing dread to the manufacturer, used to be considered by him as something almost inevitable which he had to figure on and for which he had to spend large amounts each year to insure himself against loss. The realization of the vast and unnecessary annual fire loss occurring in this country has been gradual, but it is safe to say that such realization is now a fact among the more modern classes of American manufacturers in many lines. They are showing a vastly different attitude toward prevention of fires and instead of accepting such catastrophes as inevitable, are refusing to admit that there is any just reason for their occurrence and are making every effort to prevent them or to suppress them during their incipiency. Probably no other industry has suffered from this cause more than the lumber manufacturing business. The very nature and surroundings of sawmills openly invite fires and in the past, after they have started, it has been practically impossible to check them. However, this condition is changing rapidly with the advance of modern ideas and efficiency of operations.

The advent of the mutual insurance companies really opened a new era in this direction, offering insurance at much lower cost than the old line companies. These mutual companies, specializing as they do in sawmill risks, have become not merely writers of insurance policies, but have devoted themselves to a close study of means for preventing and checking fires at sawmill plants. They have done a vast amount of propagandist work, offering many suggestions invaluable to the sawmill operator, who has gradually absorbed these ideas and applied them to his own plant with the result that the sawmill fire today is not nearly so common an occurrence as in the old days of more slipshod methods. Due credit must be given to the lumber manufacturer for the willingness he has shown to do his part in eliminating causes contributing to conflagrations. He is increasingly particular in his housekeeping with the idea of cutting down the fire hazard.

Well-Known Poison Trees

It is said that first settlers in certain parts of the United States were in the habit of watching what leaves, plants and vegetables were eaten by cattle and other farm stock, and that whatever was eaten by cattle was considered safe human food for greens and salads.

The settlers were not following safe guides. Cattle, sheep and horses have no means of knowing what is poisonous and what is not, and they seem to be incapable of learning by experience. They will eat a poison plant a second time, provided they survive the first experience.

The loss of stock on some of the western ranges, on account of poisonous forage plants, is heavy. Most of such plants are annuals, but there are well-known trees in this country, whose fruit or leaves are poisonous. A few years ago in a certain mountain range in Utah, flockmasters lost many sheep while driving them along a trail which led from one pasture to another. Upon investigation it was learned that the immediate cause of death was a species of chokecherry upon which the hungry sheep browsed as they passed over the trail. Having determined the species of plant responsible for the losses, the remedy was simple but effectual. Certain portions of the old trail were abandoned, and along other portions the chokecherry bushes were cut out. The method of handling the sheep was also changed. Instead of large bands which could be moved but slowly, smaller bands were trailed, and so far as possible they were allowed to fill up on healthy forage before entering the dangerous area. The trail was also improved wherever practicable and by this means it was possible to get the sheep through in much better shape and with little or no loss.

It is said that all species of cherry bear poisonous leaves, but the poison is seldom sufficiently concentrated to be harmful unless the leaves are withered. The harmful principle in cherry leaves is supposed to be prussic acid.

Forest rangers are trained to look out for poison areas. Expert botanists are constantly traversing the government forests in the West, locating dangerous areas and putting up skull-and-crossbones flags, or other notices to give warning to stockmen.

Where the areas involved are not too great in extent, fences are built around them so that stock like horses and cattle cannot reach them. It is believed that some of these poisonous plants can be choked out by planting certain aggressive grasses which in time will take full possession of the ranges. Other plants like the wild parsnip, which is so fatal to cattle, grow to such a height as to be easily seen and are not so numerous but that they can be completely eradicated from a range by pulling them up by the roots.

Some plants, like the lupine or wild pea of the western mountains, are deadly at one season of the year and nearly harmless at another.

The stockmen grazing their cattle on the national forests in the Southwest, especially in Colorado and New Mexico, have suffered serious losses through the cattle eating oak leaves. In that section of the country the seasons are dry, and grass extremely scarce. To eke out the scanty forage supply, the cattle browse heavily on the scrub oak which covers large portions of the range. Ordinarily the stock does not browse much on the oak and the little they do get, taken with the other food, is not injurious, but when the oak browse furnishes a large proportion of the daily food of the cattle, the results are serious.

The oak leaves and sprouts contain a large percentage of tannic acid. The action of this acid on the stomach is extremely injurious and the losses have been severe. The symptoms of the disease are staring eyes, feverish and blistered lips and nose, the animal ceases to graze or seek for food, standing in one place for hours at a time. The coat becomes rough and the hair is all turned the wrong way. The animal does not chew its cud and in a comparatively short time it becomes too weak to remain on its feet and death rapidly follows.

So far as is known the only available remedy for this trouble is linseed oil given as a drench in amounts of from one to two quarts. The oil appears to overcome the injurious effects of the tannic acid and if the disease is not advanced too far and the animal can be furnished sufficient food so it will not be forced to eat the oak, it will generally recover. The best method, of course, in handling the trouble, is, if possible, to get the cattle away from the range where the oak is found and furnish them with plenty of fresh green feed.

Neglected horses among the Allegheny mountains will devour dry white oak leaves in winter, if driven to it by hunger. Death from that cause seldom results, but the unfortunate animal becomes as coarse-haired and uncouth as a hyena.

Mountain laurel or ivy (*Kalmia latifolia*) and its smaller cousin, poison laurel (*Kalmia angustifolia*) are well known and justly dreaded as destroyers of sheep. Cattle may be injured, too, but they are not apt to eat the laurel. There has been considerable controversy as to the exact nature of the laurel poison. Chemists are not quite certain that they have isolated it. Some persons deny that the laurel leaves contain poison, and insist that they are simply indigestible, and when death results, it is simply a case of stomach trouble. This theory has few adherents. The symptoms of poison are too pronounced to admit of much doubt. Fortunately, sheep and cattle will not eat laurel if other feed is obtainable.

The fruit of the buckeye is reputed to be poisonous if eaten by cattle. They don't often eat these nuts or seeds, though the tree is fairly abundant in a region embracing nearly a million square miles. It is not known that the buckeye is poisonous as human food. The nuts of all eastern species are so bitter that no one attempts to eat them; but the California buckeye is passed through some process of denaturing by the Digger Indians, after which they eat the kernels without apparent injurious consequences.

When cattle eat buckeyes to excess the symptoms are soon made manifest. The ordinary verdict of the farmer is that "the brute is crazy." Wild, staring eyes, suggesting an overdose of belladonna, are the most noticeable characteristics; but a stiffening of the joints follows, and the animal continues to walk long after it is unable to step over an obstacle six inches high.

The Westminster Hall Roof

No one is apt to lose any respect for the venerable English oak on account of the recent discovery, by the Timber Trades Journal of London, that the famous roof of Westminster Hall is Irish oak instead of English. It is the same species of oak, the difference between England and Ireland not being great. The interesting point is that the exact spot where the roof timbers were cut should be ascertained after the lapse of 815 years. The roof of the famous building was supposed to be of English oak, but recent discoveries make two corrections necessary, one that the oak came from Ireland, and the other that some of the timber is chestnut. A few of the beams which support the roof are two feet square.

An old history has been found in Dublin which gives an account of the cutting of the oak in 1098 for the Westminster Hall roof. The English lumbermen who went to Ireland to cut the timber were called "certain Easterlings." They cut the trees on a tract of land which Murrough, king of Leinster, had given to a church.

Repairs of the roof were subsequently made, and it is considered probable that some later timbers were mixed with the old; but many of the old are in place, tolerably free from decay, though somewhat worm eaten. The chestnut timber seems to have withstood the ravages of time as well as the oak. It is described as Spanish chestnut. A photograph of a cross section shows the annual rings as distinctly as if the tree were cut a year ago, and a magnifying glass of moderate power reveals the characteristic open pores of chestnut, arranged in rows along the inner edges of the yearly rings. A photograph of the oak shows the medullary rays clearly, but the pores do not seem to show in the picture.

Instances like these cannot fail to emphasize the fact that wood will survive men, generations, families, and dynasties when given proper protection.



Tales of the Trade



A TRUE SOUTHERN GENTLEMAN

While on a recent trip covering his usual route, Alexander Hamilton Bohn, the urbane and polished representative of The Waldstein Lumber Company of St. Louis, had a rather distressing experience at Davenport which he never mentions even to his most trusted friends, but which has leaked out through reliable channels.

Several St. Louis salesmen were stopping at the same hotel and concocted a horrible plot entailing the placing of a fully dressed dressmakers' dummy in a bed in one of the vacant rooms of the hotel and paging Mr. Bohn who soon appeared at the door and softly rapped. Hearing a silvery voice cry "come in," Alex stepped inside and upon catching sight of the reclining figure immediately lost his nerve and backed out with most profuse apologies, his "Excuse me, Madam, Oh pardon me my dear Madam," echoed through the corrilors of the hotel and with dripping brow and anguished manner the portly lumberman retired to the cooling shades of the grill room and positively refused to seek the shelter of his own room until escorted by two bell boys and the clerk.

Mr. Bohn now crosses the street to avoid milliners' and dressmakers' dummies.

HIS FIRST CIGARETTE EXPERIENCE

Frank Buck of the Estate of Daniel Buck, an all round popular lumberman, related an incident of his trip abroad, at a dinner of the Philadelphia Lumbermen's Golf Club, of which he is the president, which laughable as a reminiscence was rather a crushing experience. Mr. Buck never uses tobacco in any shape, but while in Egypt he bought a few boxes of the finest cigarettes for a relative at home, which cost not much over half a dollar. He took the package to his hotel, deposited it on the mantlepiece without explanation and immediately forgot all about it. On their departure rather suddenly, Mrs. Buck, in packing, whipped everything which they had acquired in their travels by way of gifts and souvenirs into a trunk, the cigarettes with the rest, to be shipped to Nice, their next stopping place. On arriving Mr. Buck, who was questioned at the custom house as to whether he had any spirits or tobacco not declared (a formality which he considered most superfluous in his case), answered, "None whatever," with an emphasis which seemed decisive, but after the fatal inspection, to his amazement and chagrin, Mr. Buck, who had forgotten for all time the cigarettes, was ignominously escorted to the front to answer charge of trying to convey dutiable goods under false declaration. Well, he was in it deep for an innocent man, and the only way out was to pay the fine of ten dollars and keep mum, but the thing was too good to keep and Mr. Buck, who never grudges a good joke even at his own expense, is generous enough to pass it around to his friends. He is more opposed to tobacco than ever now, and the sight of a cigarette always brings a blush to his cheek.

THE BULLHEAD TWINS IN TROUBLE

The Youngblood brothers, Tom and Paul, both of whom are shining lights in the Payson Smith Lumber Company, are noted fishermen in their home towns of Minneapolis and St. Louis, and on urgent invitation Tom recently ran up from St. Louis to Minneapolis for a fishing trip with Paul. They secured leave of absence for a week and immediately "hiked" to one of Minnesota's 10,000 lakes with sufficient paraphernalia to depopulate any four of said lakes. It may be stated here that Paul is called the bullhead specialist of Minneapolis. In the first day's catch were a number of fine specimens and the boys decided to have a bullhead feed. Tom not being so familiar with the handling of this class of game fish was advised by Paul that the best way to dress the fish was to scald it, whereupon Tom decided to hold the bullhead by the mouth with a pair of pinchers while Paul applied the hot water. This was done, but as a bullhead is never dead until he is eaten, this one objected strenuously to the operation and rose in his wrath with two mighty sideway slaps of the tail overturning the hot water on Paul and giving Tom a Minnesota swipe in the face, which accounts for a red mark that he has carried ever since. They left that night for Minneapolis, Paul going into retirement for several days to nurse his burns, while Tom departed at once for St. Louis, declaring that one day's fishing was enough for him, anyway.

By a unanimous vote they decided that the next time they scald a bullhead they will apply the hot water around the corner with a hose.

"AND THE GREEN CORN GREW ALL AROUND"

Not every city of the prominence of Memphis can boast of a combination lumber yard and corn plantation, but it is stated on good authority that the city mentioned possesses such a curiosity at the plant of the Gayoso Lumber Company.

It seems that several months ago Wick Ransom, the head of this concern, becoming enthused with the "clean up and beautify" idea which had taken possession of "The Big City on the Big River," conceived the idea of making a garden spot around the office, which building is situated in the center of the company's extensive lumber yard. Flowers were planted and grass seed sown and Mr. Ransom was about to plant morning glory vines—one at each post of the surrounding fence—when one of his darky employes advised him thus: "Mista Wick, ef you all wants dem vines to do right well all you got to do is to drap a couple kernels of corn in the hole with each seed and plant 'em in the right time of the moon and they sho will grow right smart and be purty peart vines."

Wick, not being above advice even from a lowly source, followed the instructions and in a short time visitors not familiar with the plant had difficulty in finding the office, and several returned to the city stating that this was the first lumber yard they ever saw which had no office but a corn field in the middle of it.

The Gayoso Lumber Company has decided in the future to run its lumber operations in Memphis and its plantation in some adjoining state, or at least outside of the city limits.

LAUGHED TOO SOON

P. R. Hamilton and A. S. Bliss, both of the Minneapolis Lumber Company, are beginning to be considered the champion gallants of the Northwest.

Several weeks ago, while seated in a Minneapolis cafe, Mr. Bliss found it his duty to assist a young lady of great avoirdupois, seated at the same table. When endeavoring to pick up her purse her chair slid out and deposited her on the tile floor. Mr. Bliss stated afterwards that he could see no very good place to get hold of, consequently in true southern fashion (being from Tennessee) he grasped her hand and assisted her to arise.

It was almost necessary to take his partner to the hospital from the results of his laughter, but Mr. Bliss came through the episode with flying colors, maintaining his dignity to the last. About three weeks later when seated in the same restaurant a middle-aged woman, weighing probably 240 dressed, became suddenly possessed of an idea to sit down on the floor. This time it was Mr. Hamilton's turn to do the gallant and remembering even in the moment of his distress his severe strictures on the manner of his partner's methods in the previous case, P. R. grasped the woman by the shoulders and stood her on her feet with a thump. As she had just commenced her lunch and he could not indulge in merriment in her presence, Mr. Bliss so injured himself by suppressed laughter that it became necessary for him to take an extended vacation to overcome the effects.

He states that this was the most striking case of swift retribution that he ever witnessed and the motto now to be found over his desk is, "He who laughs last laughs best." He is still firm in his belief that the southern methods of assisting ladies is much better than the Minnesota strangle hold.

When they do put up that wood products exposition why not see to it that it has a good hardwood floor?

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 560—Wants Hackmatach Ship-Knees

New York, N. Y., Sept. 15.—Editor HARDWOOD RECORD: I have some trade or hackmatach ship-knees and would like to know if you know of any concerns in Michigan which make this class of stock. If you will give me this information, I should be very much obliged.

——— & ———

The above party has been given the names of people who can probably suggest sources of supply for the material sought.—EDITOR.

B 561—Seeks Market for Red Cedar

Charleston, W. Va. Sept. 15. Editor HARDWOOD RECORD: Will you please give us a list of buyers of red cedar in the log?

——— LUMBER COMPANY.

The above correspondent has been supplied with a brief list of buyers of this material. Any others interested can have the address on application.—EDITOR.

B 562—Seeks Market for Locust Turnings and Sawdust

Shippensburg, Pa., Sept. 17.—Editor HARDWOOD RECORD: Will you advise us where we can obtain a market for locust sawdust and locust turnings? ——— PIN COMPANY.

The above correspondent has been advised that the chief market for locust is in the form of telephone and telegraphic insulator pins, and that we know of no particular market for locust sawdust. Anyone interested can have the address on application.—EDITOR.

B 563—Wants Red Oak Dimension

Oshkosh, Wis., Sept. 18.—Editor HARDWOOD RECORD: Will you please give us the address of parties who make firsts and seconds red oak dimension stock? ——— COMPANY.

This inquirer has been supplied with a brief list of manufacturers of red and white oak dimension material. Any others interested can have the address on application.—EDITOR.

B 564—Seeks Work on Lumber Finishing

Philadelphia, Pa., Sept. 17. Editor HARDWOOD RECORD: We understand there is gotten out a catalogue showing how different kinds of lumber can be finished. By this we mean that the catalogue shows photographs of the finished material. Can you advise us where we can secure a copy of this book? ——— LUMBER COMPANY.

The above correspondent has been advised that we have no knowledge of a work of the character named save such publications as are issued by the paint and varnish houses. Anyone having a knowledge of such a publication will kindly advise.—EDITOR.

B 565—Seeks Wire Tree-Felling Apparatus

Chicago, Sept. 17.—Editor HARDWOOD RECORD: Through this association's permanent representative in Buenos Aires comes a request from the forestry department of the Argentine government for information regarding a system of cutting trees, which is said to be used in the United States, by means of a platinum wire with an electric current.

Complete information regarding this method is desired; a description of the apparatus, its cost and where it can be purchased, i. e., all the details, both technical and commercial, regarding this scheme of tree cutting. We shall appreciate any assistance you can give us in securing the desired information. THE CHICAGO ASSOCIATION OF COMMERCE,
H. F. Miller, Business Manager.

Mr. Miller has been advised that while this system of felling trees with an electrically charged or electrically driven wire has been discussed and experimented with for many years, we are not aware that any apparatus of this sort has attained practical use. We will be pleased to have anyone having a knowledge of this subject advise us if anything definite has been accomplished.—EDITOR.

B 566—Wants Tie Sidings

Chicago, Ill., Sept. 17.—Editor HARDWOOD RECORD: We are in the market for from three to five cars of 4/4" 8' log run white oak tie sidings. If you will put us in touch with producers of this stock we will appreciate it very much. ——— LUMBER COMPANY.

Anyone having this stock to offer can have the address of the inquirer upon application.—EDITOR.

B 567—Seeks Chemicals for Rotting Out Stumps

Cape Girardeau, Mo., Sept. 15.—Editor HARDWOOD RECORD: At various times we have heard of the success of some chemicals used for rotting out the stumps of hardwood timber. Having in contemplation the clearing of a large acreage for farm purposes, we are interested in any process that will facilitate this work and write you to ask whether there is anything at all to this proposition of using chemicals instead of mechanical stump pullers. ——— LUMBER COMPANY.

HARDWOOD RECORD is not familiar with any chemical process for destroying stumps on cut-over lands. If any of the readers of this publication have any specific knowledge covering this subject it will be highly favored if they will communicate it to this office.—EDITOR.

B 568—Seeks Oak Dimension Stock

Philadelphia, Pa., Sept. 13.—Editor HARDWOOD RECORD: Please advise us if you can furnish us with a list of manufacturers of small oak dimension stock like 2½x2½ 28 to 30". ——— & ———

The above correspondent has been supplied with a brief list of oak dimension manufacturers. Any others interested can have the address on application.—EDITOR.

B 569—Seeks Elm for Trunk Slats

Richmond, Va., Sept. 16.—Editor HARDWOOD RECORD: We are having trouble in getting material for the cutting of elm trunk slats. Can you favor us with a source of supply for this material? We want the stock fully two inches thick as we have facilities for ripping out the slats ourselves. ——— & ———

The above correspondent has been supplied with a brief list of elm manufacturers. Anyone specializing in elm material for trunk slats can have the address of the inquirer on application.—EDITOR.

B 570—Seeks Large Oak Dimension

New York, Sept. 12.—Editor HARDWOOD RECORD: We would like to get in touch with some concern which will saw large dimension oak for us. Will thank you very much if you will give us this information.

——— COMPANY.

This correspondent has been supplied with a brief list of manufacturers of oak timbers. Any others interested in the marketing of this material can have the above address on application.—EDITOR.

B 571—Seeks Process for Eliminating Sap Stain

Memphis, Tenn., Sept. 11.—Editor HARDWOOD RECORD: I would appreciate very much if you can advise me if there is any method other than the soda dipping process for use in preventing the staining of lumber. Would also like to know if you have known of any other methods being tried regardless of whether the results were successful. ——— & ———

The above correspondent has been advised that the Forest Service a year ago or so made exhaustive experiments with sundry chemicals for eliminating or minimizing sap stain, and issued an exhaustive report on this subject, which book can be had on application to the Department of Agriculture, Washington, D. C. None of them, including the soda dipping process, were regarded as even approximately successful. The writer is further advised that steaming wood under pressure as practiced by the Kraetzer system in the Kraetzer Preparator in most instances entirely eliminates sap stain on gum and other woods prone to stain.—EDITOR.

B 572—Seeks Red Cedar Logs

Meridian, Miss., Sept. 13. Editor HARDWOOD RECORD: We have an inquiry from Austria for red cedar logs 12" to 20" in diameter. Also for thin boards for pencil factories. Can you refer us to a probable supply?

LUMBER COMPANY.

This correspondent has been given a brief list of Tennessee red cedar producers, and is also advised that a good deal of red cedar going into use as pencil stock at present is now being secured from the incense cedar of California. He has been referred to Frederick L. Sayre, president of the Sugar and White Pine Agency, San Francisco, for further information concerning California cedar. Any others interested in the inquiry can have the address on application.—EDITOR.

B 573—Has Tomato Crate Stock to Offer

Bleecker, Fulton Co., N. Y., Sept. 12.—Editor HARDWOOD RECORD: Please send me the names of firms who employ tomato crate stock. We have a good deal of material which we believe will work to good advantage into crates. ———

This correspondent has been supplied with a brief list of crate manufacturers. Any others interested in material of this sort can have the address on application.—EDITOR.

B 574—Seeks White Oak and Hickory Dimension

Fort Wayne, Ind. Sept. 22. Editor HARDWOOD RECORD: I am anxious to get the names of a number of persons who manufacture dimension stock, all sizes and lengths in white oak and hickory.

———— LUMBER COMPANY.

The above concern has been supplied with a list of manufacturers of the stock asked for. Anyone interested can have the address on application.—EDITOR.

Clubs and Associations

National Hardwood Executives Meet

On Wednesday, Sept. 17, the executive committee of the National Hardwood Lumber Association met at the association's offices, McCormick building, Chicago. This was the first meeting since the annual convention in June and was noted for full attendance of the members. Those attending were: C. H. Barnaby, Greencastle, Ind., chairman; E. V. Babcock, Pittsburgh, Pa., C. A. Goodman, Marinette, Wis., Earl Palmer, Paducah, Ky., O. O. Agler, Chicago. The committee took up routine business chiefly.

Michigan Forestry Association Organizes

The Michigan Forestry Association was formally organized at Grand Rapids, Mich., on Sept. 15. The incorporators are: John W. Blodgett, David Wolf, Wm. H. Anderson, Charles W. Garfield, Robert D. Graham, E. A. Stowe, W. D. Mershon, Filibert Roth and John A. Bissell.

John W. Blodgett was elected temporary chairman and the other Grand Rapids delegates were trustees. The first trustees elected William H. Anderson, chairman, and Charles W. Garfield, secretary-treasurer.

Handle Manufacturers Organize

On Sept. 11 and 12, the handle manufacturers convened at the Hotel Planters, Chicago, from all parts of the country, for the purpose of organizing. Constitution and by-laws were adopted and the following officers were elected:

PRESIDENT—H. B. Marsh, Terre Haute Handle Company, Indianapolis.

FIRST VICE-PRESIDENT—H. P. White, Indiana Wood Products Company, Spencer, Ind.

SECOND VICE-PRESIDENT—H. C. Long, H. C. Long Handle Company, Cardington, O.

THIRD VICE-PRESIDENT—Victor Grove, Calloa, Mo.

SECRETARY-TREASURER—H. B. Alexander, Columbia Manufacturing Company, New Philadelphia, O.

It was decided that a committee with the vice-presidents acting as chairman, should be appointed for ash, maple and hickory handle divisions, in order to separate the representatives of those various sections. H. P. White represents the ash manufacturers, H. C. Long, the maple, and Victor Grove, the hickory.

The association already has forty members. The next meeting will be held at Indianapolis at a date to be decided later.

Meeting North Carolina Forestry Association

The regular meeting of the executive committee and officers of the North Carolina Forestry Association has been called to meet in the Chamber of Commerce rooms at Raleigh, N. C., on Tuesday, Sept. 30, at 10:30 a. m. The object of the meeting is to plan the work of the association for the coming winter season. Several very important matters will be discussed, so that a large and representative gathering is desired.

As the special meeting of the Legislature will then be in session, the subject of forest protective laws will probably be taken up.

In view of the past year's record of over one million dollars damage to property from forest fires, the question of working for laws to protect the forests from fire has become of pressing importance. The recent collapse of the cattle industry in Brunswick county through an infringement of the quarantine regulations has brought once more to the front the question of statewide stock law, a measure which has long been advocated by this association as of first importance in perpetuating eastern Carolina forests.

Now that the children of North Carolina schools are guaranteed six months instruction, some regular means should be employed to instruct them in the importance and value of the forests to the state. The observance of an annual Arbor day and the distribution of leaflets to the school children are measures which are strongly advocated by this association.

Memphis Trade Enjoys Boat Ride

The annual boat ride given by the Lumbermen's Club of Memphis took place Thursday evening, September 11, and proved an unusually enjoyable occasion. When the Steamer Pattona left the local wharf more than 500 persons were aboard, including members of the club and their guests. The entertainment committee, headed by F. E. Stonebraker, had all arrangements in charge and these gentlemen performed their duties so well that everything passed off without a hitch with the exception of the plans made by the board of directors to hold a meeting while the ride was in progress. This idea was tabooed by the other members of the club and by all who were party to the excursion, with the result that the meeting had to be abandoned until another time. A splendid band was engaged for the occasion and there was excellent music. Dancing was one of the principal diversions of the evening. The boat was big and roomy and had a splendid floor in the salon and the younger members of the party spent the greater portion of their time in the mazes of the waltz, two-step and the rag.

All those invited were enjoined from eating dinner before coming aboard the boat, with the result that there were splendid appetites for the box luncheon prepared by the entertainment committee. There was likewise something to drink which added spice and zest to the occasion. The ride lasted for five hours and when the guests were leaving the boat they were profuse in their thanks to the members of the club and to the entertainment committee in particular for the delightful evening afforded them.

Memphis Trade Discusses Important Questions at Monthly Meeting

The first regular meeting of the Lumbermen's Club of Memphis for the fall season was held at the Hotel Gayoso Saturday afternoon, Sept. 20, John M. Pritchard presiding. The attendance was exceptionally large. Manhattan cocktails were served before the luncheon and W. R. Barksdale, a former president of the club, proposed a toast to the success of the club during the new business year. The members responded heartily and the occasion was regarded as a particularly auspicious one.

Reports were submitted by a number of special committees to whom work had been assigned during the interim. One of the most interesting of these was that of the river and rail committee to which had been referred the question of the attitude of the lumbermen of Memphis regarding the proposed advance in freight rates amounting to five per cent on the part of the railroads north of the Ohio river. The committee reviewed at some length the conditions affecting rate making and was decidedly of the opinion that there was a great deal of readjustment necessary. Without going into details regarding this matter, it may be noted that the conclusions of the committee were summed up in the following resolutions, which were adopted by unanimous vote:

That the Lumbermen's Club of Memphis is not opposed to the five per cent horizontal advance in freight rates as proposed if the Interstate Commerce Commission in its wisdom is convinced from the evidence presented by the carriers that the necessity for such advance in freight rates really exists and

That we reserve the right to make protest against any inequalities in freight rates which now exist or which may arise affecting our interests, and

That a copy of these resolutions be sent to the secretary of the Interstate Commerce Commission.

The river and rail committee also reported that while there were numerous complaints regarding overweight charges, these were not so plentiful as they were a short time ago. J. W. McClure, chairman of the committee, stated that most of the overweight claims arose in cases of cars thirty-eight feet and shorter and that, in his opinion, this trouble could be largely corrected if the railroads would carry out the instructions of the Interstate Commerce Commission in connection with the weighing of these shorter cars uncoupled. The committee was authorized to confer with the carriers to the end that this troublesome problem might be solved.

Mr. McClure also called to the attention of the members the prospects for reinstating the reshipping privileges which were taken away from Memphis some years ago. He said that J. T. Townshend, general manager of the Southern Hardwood Freight Bureau, was working out a plan by which Memphis would be given the reshipping privileges which would restore the yarding business which was greatly curtailed when the reshipping facilities were eliminated. This plan calls for the protection of the through rate from point of origin to destination, plus a charge of $5 per car for the privilege of stopping the lumber in transit for rehandling, yarding or other purposes. This information was hailed with delight and Mr. Townshend was instructed to proceed and to work out the plan so that it might be applicable to Memphis to the end that this city might be placed on an equitable basis with Grand Rapids, Cairo and other centers.

James E. Stark, chairman of the law and insurance committee, reported that the proposed bill in the special session of the legislature of Tennessee which seeks to prevent the placing of insurance with companies not authorized to do business in the state without the payment of an added premium of three per cent and which seeks to impose heavy penalties, including imprisonment for non compliance, had been the subject of a meeting on the part of himself and associates. His report was made in the form of resolutions which provided that the committee was opposed to any legislation along this line without first submitting the bills in question to the commercial organizations of the state in order that they might determine whether or not they were good or bad. Copies of these resolutions were ordered sent to the special committees of the House and Senate, having these measures in charge. The club unanimously adopted the report.

George C. Ehemann of the special committee appointed to look into the furnishing of the rooms offered the Lumbermen's Club of Memphis in the building owned by the Business Men's Club, said that the committee had decided that the interior finish of the room would be made with specimens of lumber furnished by members of the club, so that those who visited these rooms could see just exactly what could be done with these woods in the way of interior finish and decorative art. He estimated that it would cost approximately $1,000 to fit up the rooms properly and his committee was instructed to proceed. The rooms will be exceptionally handsome.

J. D. Allen, who was one of the committee who went to New Orleans to protest against the ruling of the steamship companies regarding not accepting any lumber bearing more than one mark, said that the matter seemed all-important before the committee reached that center but of very little significance after that point was reached. It was discovered that, while the Leyland line had sent out a circular letter to this effect, some of the other steamship companies were not in sympathy with the movement and would not insist upon one single mark. The committee discussed the matter with the steamship officials and were assured that the steamship companies would recede from their arbitrary position. Circular letters have been received to that effect since the return of the committee. The subject of more bands in shipment of lumber in bundles was also discussed while in New Orleans and the committee agreed that bands would be placed for every four feet, with five bands in the case of lumber as long as sixteen feet. The committee also reported that it agreed to caution all members exporting lumber to be very careful with the stenciling of marks thereon to the end that the steamship companies may have as little trouble as possible therewith.

Mr. Egan, general superintendent of the Yazoo & Mississippi Valley railroad, was a guest of the club and expressed very great pleasure in being present. He said that he fully appreciated the importance of the lumber industry to Memphis and the Memphis territory and that he likewise appreciated the importance of the Yazoo & Mississippi Valley road to the lumber industry. He also said that he recognized that he had a part to play in making the lumber business a success because of his connection with that road. He believed that this could be done through "good service, fair treatment and proper handling" and he declared that this would be his motto. He further said that he realized fully that lumbermen and other shippers could help materially and he asked that they load all cars to full capacity. He reported the result of investigations which had been made at his instigation, showing that in the movement of general traffic, including lumber, only one of 400 cars had been loaded to full capacity on the Yazoo & Mississippi Valley road and that statistics in the office of the Illinois Central indicated that only fifty-five per cent of all cars were so loaded. He said that the Illinois Central owned 65,000 cars and that, if shippers loaded to full capacity, there would never be any complaint regarding car shortage or lack of equipment. He declared that the Yazoo & Mississippi Valley road was going to give good service anyway but that the lumbermen would aid substantially in the accomplishment of this result if they recognized and fully appreciated the significance of loading to full capacity and the harmful influence of loading only twenty tons in a car of fifty to fifty-five tons capacity. He insisted that the carriers and shippers alike were going into a heavy season and that there was some apprehension regarding a shortage of cars. He did not feel particularly anxious himself but much depended upon the attitude of shippers. He insisted that every log on the Yazoo & Mississippi Valley road should be handled to Memphis or other manufacturing centers immediately and that lumbermen and other shippers should, if necessary, increase their facilities for carrying raw material. He thought that it was very short sighted policy to delay handling logs now and then of complaining regarding lack of equipment later. He said that he had sent 100 flat cars to other territory because they were going begging at Memphis despite the large quantity of logs on the line awaiting transportation. He wanted all loading companies to increase their operations while there were plenty of cars and likewise plenty of power available against the time when conditions may be somewhat if not entirely reversed. At the conclusion of his remarks, President Pritchard thanked Mr. Egan for the frank and straightforward manner in which he had handled a subject which must of necessity be of prime importance to practically every member of the club.

Daniel Katz of the American Land, Timber & Stave Company was elected to active membership. Two other applications were reported by the membership committee but these will not be voted on until the next regular meeting of the club two weeks hence.

Chicago Lumbermen Start Bowling Season

On Monday evening, September 22, the Lumbermen's Bowling League of Chicago opened up its scheduled season for 1913-1914. The league made arrangements to have the eight teams bowl at one time each Monday evening at Flenner's alleys. This arrangement is an improvement over the former arrangement under which three teams bowled each night.

The officers of the league are: A. H. Ruth, president; William Liddell, vice-president; W. Boeson, treasurer, and Fred Roedter, secretary.

Lumbermen Golfers Busy at Philadelphia

The September golf tournament and annual meeting of the Philadelphia Lumbermen's Golf Club came off at Huntingdon Valley Golf Club grounds Sept. 16. The day was an ideal one in every particular and the souls of the golfers were primed for athletic glory. Thirty-six players and two visitors were present. The golfers, divided into eight four-somes and two two-somes, were soon in vigorous contest, and although the scores were somewhat high the competition was keen, and a good natured rivalry prevailed throughout the game. E. B. Humphreys won the first prize, a sweater; J. Elmer Troth and Edward F. Henson tied for second prize, a half-dozen pairs silk stockings, which was decided by a toss up. E. F. Henson won. The third prize, a neck tie, fell to J. E. Troth. A special concealed bogey prize (four golf balls), which was a tie between J. Anderson Ross and W. Henry Smedley, was decided by a toss up. Smedley won.

The usual dinner, which was presided over by President Frank Buck, was one to tickle the most epicurean palate, and was much enlivened by witty speeches followed by much laughter and enthusiastic cheering. At the meeting which was next in order, the treasurer's report showed a balance on hand, and recommended a continuation of the dues at three dollars, but after much discussion the rate was raised to five dollars per year. The secretary, Ben C. Currie, made his annual report, in which he showed an average attendance of twenty-nine members at the monthly games, and in which he suggested that the inactive members be dropped from the roll. The new officers elected are:

President, Eugene W. Fry; vice-president, J. Anderson Ross; secretary, J. Elmer Troth; treasurer, Ben C. Currie; executive committee, Horace W. Smedley, William H. Fritz, Frank Buck, J. B. McFarland, Jr., and E. B. Humphreys.

Bulletin of Inspection National Hardwood Association

The September bulletin of the National Hardwood Lumber Association contains besides its statement of inspection and various other statistical information, referendum No. 4 presented by the Chamber of Commerce of the United States of America, of which the association has been a member for the past year, regarding various features of the present currency reform measure at Washington.

The ballot is preceded by a further analysis of the purpose of the Chamber of Commerce written by Earl Palmer, national counselor, in which he urges that its affairs be closely followed by the membership of the National Hardwood Lumber Association. The trade should take this opportunity of having a voice in a question which is without doubt one of the biggest issues of the day.

Regarding inspection the report says that the inspection department officially inspected and measured 17,613,035 feet of hardwood lumber during August, 1913, and that the total earnings of the month were $5,677.15. Salaries and expenses for the month were $5,609.52, including the salary of the chief inspector.

Tournament of the Chicago Club

The tournament committee of the Lumbermen's Club of Chicago has just announced that the fall pool and billiard tournament will be held early in October. Both will be handicap tournaments and everybody will get a good handicap. Among the prizes are cups for the winners; the president's cup in pool and the directors' cup in billiards, and also second, third and fourth prizes and high-run prizes.

The last tournaments were great successes and from them it can be judged that the coming tournaments will be even more closely followed. The entry lists are open and it is expected that both of them will be class tournaments, a prize for each class if sufficient entries are secured. The fee in each tournament is one dollar.

With the Trade

Starts Business in Memphis

The Memphis Siding & Lumber Company is the style of a recently incorporated concern which will do business at Memphis, Tenn. F. J. Blackwell, who has been active in lumber business in Memphis and vicinity for years, will be the active man in the new concern. He will have associated with him S. B. Anderson of the Anderson-Tully Company, Memphis, and George F. Riel of the Paepcke Leicht Lumber Company, Chicago.

Mr. Blackwell first entered the lumber business twenty years ago at Brownsville, Tenn. He later took a position with Lee Wilson & Co., at Wilson, Ark. He was later transferred to Memphis, and finally organized the Memphis Poplar Products Company, which concern he handled so successfully that it has attained a highly satisfactory condition.

Mr. Blackwell resigned as president of this company in February and since then, up to the time of organizing the new concern, he has been operating under his own name.

The Memphis Siding & Lumber Company is located at Seventh street and the Belt Line railroad. It will handle lumber, siding and interior trim on a wholesale basis.

Receiver for North Carolina Concern

The Kanawha Hardwood Company of Andrews, N. C., is in financial trouble, application having been made for the appointment of a receiver. In the application it is stated that the company is indebted in excess of $150,000, which is greatly in excess of its ability to pay. Bankers of Asheville, N. C., and cities in Georgia seek judgment on a large number of notes on which interest is due. An injunction is asked for in order to restrain the company from disposing of any of its assets, and it is claimed that conveyances have been made to hinder and defraud the complainants.

New North Carolina Corporation

The Reynolds Brothers Lumber Company, Inc., is the style of a newly incorporated concern resulting from the partnership at Franklin, N. C. The partnership included J. W. Reynolds and G. E. Reynolds and operated under the title of Reynolds Brothers Lumber Company. The partnership was in operation for about a year, and the incorporation now

includes, besides the two men named, C. H. Stone and G. W. Beebe. These four men hold the entire stock of the corporation, which is now backed with considerably more capital than the partnership commanded.

The officers of the company are: C. H. Stone, president; G. E. Reynolds, vice-president and general manager; J. W. Reynolds, secretary and treasurer. Mr. Stone and Mr. Beebe will not take an active part in the business administration.

Messrs. Reynolds hail from Tennessee and were connected, before their North Carolina enterprise, with George C. Brown & Co., formerly of Memphis but now at Proctor, Ark. G. E. Reynolds holds the position of secretary and treasurer for that company. J. W. Reynolds had charge of the Brown yard at Franklin for several years.

Mr. Stone is now secretary and treasurer of the Southern Lumber Company at Clayton, Ga., and is also interested in Pacific coast lumber and timber operations. Mr. Beebe is president of the same company.

The new corporation will continue business at Franklin and in addition will start operations in South Carolina on some recently purchased tracts of hardwoods.

Nickel Plate's Shops Burned

The Stony Island, Ill., shops of the New York, Chicago & St. Louis Railroad, better known as the Nickel Plate, were burned on September 10, with a loss of $500,000. In addition to two large buildings, ten locomotives, various machinery, equipment and material were destroyed.

Notice of Creditors' Meeting

The notice of the first meeting of the creditors of the bankrupt Maley, Thompson & Moffett Company, Cincinnati, O., has just been issued by Charles T. Greve, referee in bankruptcy. The meeting will be held in the district court of the United States for the southern district of Ohio, western division. The notice states that on the eleventh day of September the Maley, Thompson & Moffett Company was duly adjudicated bankrupt and that the first meeting of the creditors will be held at room 22 Carew building, southwest corner Fifth and Vine streets, Cincinnati, at three o'clock in the afternoon of Friday, Sept. 26, at which time the creditors may attend, prove their claims and appoint a trustee.

All matters with reference to the continuance and disposition of the business will be up for consideration at this meeting. Claims must be proven in accordance with the general order in bankruptcy No. 21.

Consolidation of Two Western Journals

The West Coast Lumberman, published at Tacoma, Wash., announces that negotiations recently concluded will result in the consolidation on Oct. 1, 1913, of the West Coast Lumberman at Tacoma and the Pacific Coast Lumber Trade Journal, Seattle, the two oldest and most influential lumber trade journals in the West. The consolidated papers will be issued under the name of West Coast Lumberman and will be published twice a month at Tacoma and Seattle, respectively, on the first and fifteenth of each month.

A large news service and a more perfected organization will result from the combination of interests. It is anticipated that the new arrangement will result in more closely covering the vast territory west of the Rocky Mountains known as the Inland Empire, as well as the west coast itself. The initial issue will appear Oct. 1.

HARDWOOD RECORD unites with the many friends of these two publications in wishing them the best of success in their new move.

Big Sale of Dry Kilns

The Grand Rapids Veneer Works of Grand Rapids, Mich., is continuing its active work in the matter of selling its excellent dry-kiln apparatus to the sawmill and consuming trade. It has just submitted a list of some of the most recent orders it has booked.

The company states that the present season has returned business far in excess of last year, and that it considers the outlook for business for the fall and winter to be excellent. The list is as follows:

Central Furniture Company, Rockford, Ill.
Berlin Furniture Company, Berlin, Ont.
Valley City Chair Company, Grand Rapids, Mich.
Mechanic Furniture Company, Rockford, Ill.
Chair Makers Union, Tell City, Ind.
Wellsville Upholstery Company, Wellsville, N. Y.
Kund & Eiben Manufacturing Company, Pittsburg, Pa.
Faribault Furniture Company, Faribault, Wis.
Rockford Cabinet Company, Rockford, Ill.
Watsontown Table Company, Watsontown, Pa.
P. E. Kroehler Manufacturing Company, Kankakee, Ill.
Naperville Lounge Company, Naperville, Ill.
D. T. Owen Company, Cleveland, Ohio.
Gram Richsteig Metal Frame Action Company, Chicago, Ill.
Otto Higel Company, Ltd., Toronto, Ont.
Lyon & Healy Company, Chicago, Ill.
Geo. Palmer Lumber Company, La Grande, Ore.
Hammond Lumber Company, Eureka, Cal.
Booth Kelly Lumber Company, Eugene, Ore.
Baker White Pine Lumber Company, Baker, Ore.
John Fenderson & Co., Sayabec, Que.
Wheeler Lumber Company, Wheeler, Ore.
Metz Manufacturing Company, Dubuque, Ia.
Knott Manufacturing Company, Tell City, Ind.
Banner Buggy Company, St. Louis, Mo.
J. J. Lutz Manufacturing Company, Loudon, Tenn.
Kade Show Case & Fixtures Company, Plymouth, Wis.

Opens Offices at Warsaw, Russia

Robert Hanus has opened an office at Warsaw, Leszno 17, Russia, for the purpose of bringing about the purchase and sale for his account and against commission. Mr. Hanus has a thorough knowledge of foreign trade and goods and trade customs in general. He further has direct relations with the respective markets and with the press, enabling him to procure for all interested parties the purchase of all manufactured articles of agriculture and other raw materials.

English, American and African shippers are enabled through Mr. Hanus' office to safely sell their goods in Russia, and his organization makes it possible to get forward or dispatch promptly any order or demand for mediation.

Mr. Hanus says that he solicits the business of interested parties in the advancement of international trade between these various countries and Russia.

Acquires Hardwood Timber for Export Business

The Turner-Cummings Hardwood Company of Grigsby, Tex., has recently acquired the hardwood timber holdings of John F. Renfro at Manning, Tex., and will erect a mill at once for the manufacture of hickory and ash dimension for export.

This is considered one of the finest tracts of hardwood timber in the South, and the proposition will no doubt prove profitable to the new owners.

Pertinent Information

Announcement Forest Products Exposition

The formal announcement of the coming Forest Products Exposition has just been issued by George S. Woods, manager, from the temporary headquarters in the Otis building, Chicago. The announcement is attractively and suitably printed on Japan veneer in brown ink. It reads as follows:

"Announcement is made that the first annual Forest Products Exposition will be held in the Coliseum, Chicago, April 23 to May 9, 1914, and at the Grand Palace, New York, May 21 to 30, 1914.

"The scope and purpose of the exposition is far-reaching and highly educational, including all branches and details of the lumber, wood product, woodworking, forestry and allied interests, demonstrating clearly the advantages and permanency of the commodity."

Conditions in Liverpool

Reports from Liverpool show that arrivals from North American ports during August were 27,286 tons as against 28,687 tons in the corresponding month last year.

The import of oak logs during the month constituted about 7,000 cubic feet from this country. Stocks were light at the time the report was compiled and prices were firm.

Wagon planks in oak were inquired for moderately, but small quantities passed into consumption. Heavy stocks prevailed with a quiet demand and unchanged values.

There was a small import and consumption of elm during the month with light stocks and generally firm prices, but a moderate supply of ash from Quebec and the United States was brought in as the consumption was small. Stocks, however, continue light with steady prices.

There was a continued steady demand for black walnut from the United States particularly for good quality logs of good full sizes. Logs of other descriptions were called for but moderately, while boards and planks realized fair prices.

In satin walnut there was a quiet demand and a lower price limit.

There was a considerably greater import of finished logs than consumption, but prices continue to be firm on account of prevalent light stocks. In plank a small, moderate consumption marked the month. The stock continues sufficient for the demand and steady prices prevail.

Important in Connection with Weights

State authorities of Minnesota recently made an attempt to embody lumber under the operations of the weights and measurements law, which would compel full thicknesses to be shipped on all orders. These efforts were defeated on September 10 by the judgment of Judge Hanft of the municipal court of St. Paul. The judgment was handed down in a suit against the Cleveland Wrecking Company, which was based upon a shipment of lumber sold for three inch, but which the inspectors of the state weights and measurements department reported to contain stock from two to two and a half inches in thickness.

It was brought out in the defense that old lumber will shrink to that extent in the course of time, and that furthermore it is customary in sawmills to cut lumber scant as to thickness.

Further Suspension in Carolina Rate Case

Lumber interests in the Carolinas have secured a further suspension of the famous Carolina rate case involving advances in rates on the Southern Railway from points on that road in Tennessee, Georgia, North and South Carolina to points in Virginia, and to export and interior eastern towns. The order grants further suspension until March 27.

Further Hearings in Pridham Case in October

On September 10 the Interstate Commerce Commission announced October 9 as the date on which to resume hearings on the Pridham case involving rates on east-bound shipments of goods packed in fiber and in wooden containers. Hearings will take place at Washington.

At the same time hearings will be resumed on the Chicago switching

charges. On October 15 the question of switching charges in the Detroit territory will be taken up.

October 16 is the date for the hearing of the complaint of the Norman Lumber Company against the Louisville & Nashville railroad.

On October 22 the Wausau Advancement Association and the Memphis Freight Bureau will have hearings in their cases against the Chicago & Northwestern railroad and the Illinois Central road, respectively.

Lumbermen Protest Team Track Storage Charges in Wisconsin

Much interest was shown by lumber manufacturers and dealers of Milwaukee in the recent hearings of local shippers and receivers and representatives of railroads with Halford Erickson of the Wisconsin Railroad Commission, regarding the proposed new team track storage rules which would make an additional charge for cars held on the team tracks for longer than forty-eight hours. Shippers and receivers in various lines of industry of the state show sentiment against the new rules and hold that the demurrage charge of $1 per day for a car is sufficient without adding storage charges. While such rules are now in force on interstate commerce, it is the opinion of those who have studied the situation carefully that the railroad commission will rule against the application of the team track storage charges on commerce within this state. The commission has now received evidence from representatives of the railroads, manufacturers, jobbers, wholesalers and retailers. The report is not expected to be completed for several months. The rules to apply on interstate commerce are as follows:

1.—No charge is to be made for the first forty-eight hours after the car has been placed on the team track. Time to be computed from the first 7 a. m. after car has been placed.

2.—For the next succeeding two days a charge of $1 per day or fraction thereof will be made.

3. For each succeeding day thereafter a charge of $2 will be made.

4.—Providing weather conditions are such that the car cannot be unloaded during the first forty-eight hours, no charge will be made for cars held for this reason.

Fiber Box People File Brief

Representative attorneys of the Fiber Shipping Container Association recently filed a brief with the Interstate Commerce Commission in the Pridham case in reply to the brief already filed by the allied lumber and wooden box interests. The brief suggests that carriers have wholly failed to justify the discrimination complained of by Mr. Pridham and that the wooden box interests by the testimony which they have presented to the commission, have only confirmed what all along has appeared, namely, that the fight is instigated by the manufacturers of wooden boxes to put competing manufacturers out of business. The brief is evidently based primarily upon this contention, and upon the contention that the wooden box people merely want to secure a higher price for their products, and therefore are endeavoring to eliminate the fiber box.

Regarding rule No. 143, the brief says that the carrier lawfully may refuse to receive an insecure or defective container, and that this is so becauses the carrier is an insurer of the freight. The brief contends that the best way for the carrier to protect itself under this liability is by prescribing the specifications for a secure package.

Attorneys for the fiber box container association deny the contention of the wooden box interests to the effect that foreign trade is being lost because of shipping in fiber containers, and that insurance companies are making different rates and rules on articles carried in fiber boxes is not based on fact.

Forest Tax Improvement for Maryland

A pamphlet just issued by the Maryland State Tax Commission contains suggestions concerning how the burdens of taxation upon growing timber can be lightened and made uniform throughout the state. It is pointed out in the pamphlet that the taxation of growing timber at the lumber value has been discontinued by a number of states and that such a tax is not levied until the tree is actually cut for the sawmill. In this connection the statutes of various states are quoted to show what can be done in the way of a reform, and greater liberality in the matter of taxing the timber for the support of the state government is recommended as beneficial to the prosperity of Maryland. The subject of tax reform in so far as manufacturing interests in Baltimore and other cities of Maryland are concerned has long been under consideration there, it being the desire to attract new enterprises. Maryland's lumber production, while materially reduced as compared with the output of ten years ago, is still an important part of the industrial activities, and the matter of taxation deserves the most careful attention, especially as an intelligent handling of the problem of taxation is certain to do much for conservation and systematic reforestation.

Wooden Box Specifications

The house committee of the Northwestern Association of Box Manufacturers has under consideration a list of standard specifications which have been recommended for wooden boxes manufactured in Montana, Wyoming, Idaho, Oregon and Washington. The committee in charge of this work is active in behalf of the movement, and believes that it will succeed.

At present all sizes of boxes are manufactured without any particularly recommended standard. All of the box makers in that territory have received copies of the specifications with the request that they express an opinion.

Only five classes of boxes have been worked out in the plans as far as they have gone. These classes include cereal product boxes, biscuit boxes, dry fruit boxes, tinned goods boxes and boxes used for the shipment of firearms.

It is expected that the committee will make equally rapid strides in the standardization of other classes on which it will work.

Baltimore Ships Hardwood to Buenos Aires

What is perhaps the first shipment of hardwood lumber ever made from Baltimore to a South American country went out September 17 on the Italian bark Buenos Aires for the city of the same name in Argentina. It consisted of 204,047 feet and formed part of the cargo, which included 1,120,284 feet of West Virginia spruce. Of the latter kind of lumber a number of shipments have been made. The vessel was cleared by the McCall-Dinning Company, a firm of ship brokers, and the shipment was made on account of the American Export Company of New York.

Wyoming Builds Roads With Forest Receipts

In the state of Wyoming ten per cent of the receipts from the national forests in that state during the past fiscal year aggregated $12,000, which sum is now in the hands of the secretary of agriculture, and will probably be expended for the creation and maintenance of roads and trails within the boundaries of the national forests.

The state is already engaged in an active campaign in this direction, and besides the receipts from national forests it utilizes the twenty-five per cent of the gross income which goes by law to the states direct for schools and roads.

The idea of the new road movement is two-fold, it being planned that the highways and trails will not only open up the country to a community development and to the further development of the forest resources, but will open up delightful resort territories in which various sports and recreations can be enjoyed.

Canadian Coffin Combine

It is expected that all the makers of coffins throughout Canada will soon be amalgamated in one concern capitalized at $3,000,000. The usual plea is made that there is to be no increase in prices. The main objects of the amalgamation, it was recently announced, are to effect economy in the purchase of raw materials for the factories in large quantities and to effect a saving in shipping costs by supplying orders in different parts of the country through the factories nearest the place from which the orders come. All purchasing of raw materials will be done through the head office, and a great economy is expected when supplies are bought for all the factories instead of one. Four important concerns still remain outside the amalgamation, but it is expected that they will join soon. As an incentive to its efforts the trust, under the present Canadian tariff, will have substantial protection. The relatives of a Canadian with an imperial turn of mind and desirous of importing a coffin from Great Britain have to face a tariff of seventeen and one-half per cent *ad valorem*. On coffins imported from Australia or from foreign countries the duty is twenty-five per cent.

Lumbering in Brazil

A consular report which deals with the resources of the state of Victoria, Brazil, says:

There are vast forests in this state, and lumbering will receive a great impetus from the Victoria-Minas Railway. Numerous kinds of hardwood are found, some of the best known being the "Jacaranda," used principally for furniture; "Pau Brazil" (redwood), used for dyeing; and "Peroba," which is as useful as the expensive "Thickwood" for shipbuilding. Large quantities of cedar trees are also found. The main obstacle to lumbering in this state is that not many trees of one variety are found close together.

Biltmore "Doings" for August

In August Dr. C. A. Schenck and his students of the Biltmore Forest school spent a week in Cadillac, Mich., two weeks en route across the Continent, and a week in Marshfield, Ore. The three days previous to breaking camp at Cadillac were spent in summarizing the course, in surveying and in estimating timber. The students also visited the operations of the Murphy-Diggins Company and cruised a considerable area of the Murphy-Diggins' timber under the direction of D. Davidson, woods superintendent. The students then remained in Cadillac several days looking over the mill operations where they visited various sawmills and flooring plants, turpentine plant, retail lumber yard, handle factory, chair and desk factory, and the Cadillac Veneer Works.

The students were very much interested in the Cadillac Turpentine Company, which extracts resin from the stumps of Norway pine. The students' records show that from one cord of wood is obtained eleven gallons of refined turpentine, two gallons of pine oil and 412 pounds of resin.

The students were much interested in the Cummer-Diggins Manufacturing Company, which manufactures wood alcohol from hardwood waste, all hardwoods with the exception of elm being used. A trip through the sawmills, under the personal guidance of A. L. Saunders, general manager of the Cummer-Diggins Company, was made.

En route west the students stopped at Duluth, Minn., and went through the plant of the Clyde Iron Works, where the Clyde skidders and the McGiffert loaders are manufactured. They were very much impressed with the repair department where each piece that has ever been put into Clyde machinery occupies a separate place and is plainly labeled, thus enabling repairs to be made at a moment's notice.

The next stop was at Missoula, Mont., where the students were met by D. S. Mason, assistant district forester of the Forest Service. They were immediately taken to the headquarters of the service, and were given an opportunity of looking into the methods pursued in the Missoula district, in the classification of lands and the systematizing of maps. They visited two sawmills while in that town.

The next stop was at St. Maries, Idaho, where the school visited the Milwaukee Lumber Company, the St. Maries Lumber Company and the Stein Lumber & Shingle Company. From here they went directly to Portland, Ore., where under the guidance of some Biltmore graduates they visited most of the important plants in that territory.

The students arrived at Marshfield, Ore., on Aug. 20, where they were warmly greeted by their host, the C. A. Smith Timber Company. Here they were given their usual opportunities for studying big sawmill operations and the active forestry work being pursued by that big concern.

Dr. Schenck in connection with the August "Doings" announced that students attending Biltmore Forest School at the present time will not be allowed to participate in the tour through the German woods, and that participation is restricted to fifty members, including graduates of Biltmore, graduates of other forestry schools, national, state and municipal officers, and lumber and timberland owners. The curriculum includes visits to state, national and private forests of Prussia, Bavaria, Hesse and Baden. Among these are included the Black Forest, the Spessarts, the Forest of Frankfort, Heidelberg and Baden. As previously announced the trip will occupy eight consecutive weeks between the departure from and return to New York City, the trip to start in January and to end in March. The total expenses between the time of departure from and arrival at New York City will be $350, including all necessary outlays.

Statistics on Growth of Agricultural Implement Manufacture

An advance summary of a bulletin to be issued by the Department of Commerce on the agricultural implement industry of the United States shows that the industry has made rapid strides in the last few years. Increased acreage and difficulty in securing sufficient farm labor are the two causes suggested for this rapid increase in the use of labor-saving devices.

In 1849, 1,333 establishments were engaged in the manufacture of agricultural implements. They employed 7,220 employes and sold products to the value of $6,842,611. In 1859, 1982 concerns employed 14,814 hands, and the value of their product was $17,597,960.

In 1909, there were 640 establishments turning out a product valued at $146,320,268. This is compared to records of 1869, when there were 276 factories having an output valued at $52,066,875.

There was an increase in value of products for eight censuses from 1869 to 1909, varying from 18.4 per cent to 44.6 per cent, the latter being between 1899 and 1909. In that decade there was an increase in value of products of $45,121,840, and of this the increase from 1904 to 1909 was $34,321,924, which shows the rapid strides in the industry within the last few years.

The export value of agricultural implements increased from $3,800,000 in 1890 to $16,000,000 in 1900, and $25,600,000 in 1909.

According to the bulletin agricultural implements were manufactured in thirty-nine states, although the six leading states manufactured 82.7 per cent of the total. Illinois leads with 39.1 per cent of the total; New York is second; Ohio, third; Indiana, fourth; Wisconsin, fifth, and Michigan, sixth. These last five states are very close together in their products, and are very much less than Illinois; New York manufacturing $14,971,000 as against $57,268,000 for Illinois.

A Large Wooden Pipe

An enormous hydroelectric plant now in course of construction in Tasmania will supply power to practically every port of the island. A vertical fall of 1,050 feet will deliver the water from a reservoir on a mountain to the turbines in the valley below. The water is conducted to the reservoir by a wooden pipe four feet in diameter and a mile long. The pipe is of the built-up pattern, heavy staves and metal bands being used.

Where Substitutes Will Fail

The advocates of substitutes for wood are up against a hard proposition along one line at least. As a shipping container for such food products as may be injured or contaminated by contact with bad tastes or odors, wood has no equal, and no real competitor. Wooden casks and barrels for wines and liquors of the highest grades and most delicate qualities hold their place in spite of the persistent campaigns for substitutes. The world has been searched without finding anything else that will do as well. The situation is much the same in many other lines. Would the forests of the world be ransacked for cigar box wood, if substitutes could be forced in? Smokers simply will not take their cigars from anything except a wooden box, and they are so particular as to the kind of wood that the maker of the box sends to the interior of Cuba or Mexico to get the right kind. The agent for substitutes gets as cold a shoulder from the cigar box trade as from the tight barrel maker.

Why does not some one find a substitute for the wood tobacco pipe? At first thought, that seems easy, but in spite of meerschaum, porcelain, and everything else, the hills of Italy and France are searched for bruyere and the mountains of North Carolina for ivy root for pipes. The box for plug tobacco is in the same category. Sycamore was once insisted on for the box, and when that became hard to get, other woods were used—nothing but wood, however.

If fiber could be made strong enough or metal cheap enough for all kinds of boxes, many food products would continue to go in wood because they go uncontaminated and arrive in good order. Contact with or proximity to other materials is liable to taint or soil the contents, but the touch of wood—the right wood—is frequently so decidedly an advantage that no substitute, counterfeit, or makeshift has any chance to win or hold the place.

New Use for Charcoal

A new method of curing fish has been discovered in Nova Scotia, according to a recent consular report from Halifax. It is claimed that fish can be shipped thousands of miles and arrive in as good condition as when first caught. An important agent in the preservation is willow charcoal. It is not directly applied, but is used as a filter for ordinary sea water which is one of the preserving agents. The charcoal takes out the impurities from the water—even the gases. Brown sugar, salt, and a low temperature for a short time complete the process. The ingredients in the sea water, including the sugar and salt added, form a thin film over the surface of the fish, effectually sealing them up in a way to prevent the entrance of bacteria. The fish have been successfully shipped to Cuba and South America.

High Price for White Willow

White willow logs recently sold in London at the rate of about eighty dollars a thousand feet, board measure. They were bought by a manufacturer of cricket bats. This led an English trade journal to comment on the scarcity of the wood and the rapidity of its growth. Merchantable trees grow in thirty-five years. The wood is valuable for many purposes. The white willow (*Salix alba*) is not a native of the United States, but it has been thoroughly naturalized here, and grows even more rapidly than in England. It is one of the common willows planted for shade in this country, the weeping willow is the other. The white willow is the one usually planted in regions where the climate is a little too cold for the weeping willow. Some white willow logs, cut from trees no longer needed for shade, are finding their way to sawmills, where the lumber enters a ready market. This is one of the trees which may be depended on to attain importance in the future lumber supply of the United States. The wood is not quite so white as cottonwood, but in most other respects it resembles it, and is its equal for most purposes.

Split Hoops Still Manufactured

Although metal and machine-cut elm hoops have very largely displaced the split hoop, nevertheless the industry still thrives in a small way in various parts of the country, particularly in the mountains of New York and Pennsylvania. Of the same nature as the hoop is the wooden strap used in placing on boxes to reinforce them. The biggest demand for the split hoops comes from the South for use around rosin barrels.

Although the manufacture of a hoop or strap is simple it requires a certain amount of skill to turn out good work rapidly. In the fall and winter when the bark is tight and will not peel, hoop poles an inch or so in diameter are cut and hauled in. Hickory is by all means the best wood, but soft maple, white oak, birch and a few others will do more or less satisfactorily. The first operation after the removal of all branches is the starting of a split through the middle of the butt end of the pole. This is made large enough for the insertion of the foot which holds one-half of the stick to the ground, advancing along as the split proceeds. The chances are that the split will not proceed uniformly but will begin to run out at the upper side. As soon as the operator sees this he turns his pole over and continues as before. This turning causes the split to run up always and away from the portion held flat. If you are not familiar with this action take a small, green shoot and demonstrate it.

After splitting into halves the pieces are passed to a boy or man with a draw knife who shaves them down evenly and gives the proper finish to the ends.

A Real Profit

Everyone who is familiar with the hardwood situation realizes the great rise in values of hardwood timberlands within the last few years. A single instance of this is afforded by the case of a lumberman who about six years ago bought a tract of some 2,500 acres of land in the Adirondacks. It had been logged once but there was enough spruce left to make him think that it was a good buy at ten dollars an acre. There was quite a good stand of mixed hardwoods on it too, but they were not even considered in making the deal. Last year, however, he began logging his hardwoods. He cut over about 500 acres and secured an average yield of 5,000 board feet per acre. It cost him seven dollars to get his logs to the railroad and he received fifteen dollars a thousand feet for them, or a profit of forty dollars an acre. He thinks he can do about as well on the rest of the tract, and at the same time he is taking care to leave his woods in such condition that they will have a permanent value.

The Cohune Palm of Honduras

Honduras, which is one of the Republics of Central America, has an area of approximately 37,500 square miles and it has been estimated that fully two-fifths of this area is covered with cohune forests. Honduras consists principally of two kinds of land: the one known as pine ridge and the other as cohune ridge. The pine ridge constitutes the more elevated portions and is, generally speaking, seemingly very barren and sandy, though densely covered with pines which compare favorably with even-aged pine stands of the southern United States. The cohune ridge differs materially from the pine ridge. The soil of the latter is generally rich and loamy and possesses great agricultural possibilities. On these

ridges cohune grows in great abundance often occurring unbroken for many miles in extent. The trees grow at an average distance of about five yards from one another.

This palm which is botanically called *Attalea cohune* has long since attained considerable commercial importance. It resembles in a general way the cocoanut palm, but it is not nearly so high and the trunk is considerably thicker and shorter. This palm bears nuts from which a most valuable oil can be extracted. The trunks of the cohune have attained considerable local use for the construction of wharfs along the coast. It is to Honduras what the cabbage palmetto is to South Carolina, Georgia and Florida. While the nuts and fiber obtained from the leaves form an article of export, the trunks have not yet supplied a distinct want outside of the immediate region of its growth. It is believed, however, that sooner or later the trunks of this important and well known palm will be exported and shipped to regions beyond its native habitat for the construction of wharfs. Teredos do not attack the wood of this palm, making it very valuable for use in salt water.

Trees Imported From Abroad

This country has a lot of forest trees of many kinds, but foreigners are furnishing large numbers for planting. The total number that came in last year as nursery stock was 3,779,041. France sent more than any other country, but many came from Germany and Holland, and smaller quantities from many other countries, including India, Japan and Australia. Many of the trees are for reforesting, but some are for ornamental planting. In addition to seedling trees, 15,040 pounds of tree seeds were imported.

Will Help Wooden Beds in England

The British Bedstead Manufacturers' Federation is an organization of metallic bed manufacturers in England, which for various reasons does not seem to be having a very successful career. The direct reason for this is probably the fact that the metallic bed manufacturers have found it impossible to persuade or force the distributing trade to pay the advanced prices demanded. In fact, the Draper's Chamber of Trade of Birmingham advises members to push the sale of wooden bedsteads and to purchase such metal bedsteads as are required from firms outside of the federation. The result has been that outside firms have had plenty of orders and the federation firms have experienced a diminished demand.

A Birmingham paper states that there has been fresh competition from the United States as well as from Germany, and that manufacturers in the federation have found that they have had less trade and are paying into the pool for the benefit of small makers who are devoting their attention to other lines than bedsteads.

Tulip Poplar Bloom Possible State Flower

The Pennsylvania Forestry Association is taking an active part in the campaign for the adoption of a state flower for Pennsylvania. The yellow or tulip poplar is strongly recommended, and a dozen reasons are given why it should be selected. The flower of this poplar is not very showy, but it is interesting and belongs to one of the largest hardwoods of the United States.

Hardwood News Notes

MISCELLANEOUS

The Harlan Hardwood Lumber Company of Wells, Ky., has gone out of business.

The Eureka Lumber Company of Scranton, Pa., has moved to Northcreek, N. Y.

J. C. Alfrey is planning to erect a hardwood flooring plant at Crawfordsville, Ind.

A $20,000 addition is planned by the Crescent Furniture Company at Evansville, Ind.

The High Point Furniture Company will very soon rebuild its plant at High Point, N. C.

The Simmonds Manufacturing Company will erect a handle factory at Leominster, Mass.

The Greenville Chair Company, Greenville, Tenn., has increased its capital to $100,000

The F. R. Chambers Lumber Company, Huntington, W. Va., has filed a petition in bankruptcy.

The Maywald Brothers Furniture Company, Goshen, Ind., contemplates erecting additions to its plant.

The Woods Lumber Company of Kansas City, Mo., has sustained a voluntary petition in bankruptcy.

The Dallas-Williams Furniture Company, Beaumont, Tex., will erect a new $10,000 manufacturing plant.

The Muscatine Lumber & Box Company, Muscatine, Iowa, will make various improvements to its plant.

The Wood County Cooperage Company has been incorporated at Grand Rapids, Wis., with a $20,000 capital.

An increase in capital stock has been made by the Evansville Coffin Company, Evansville, Ind., to $50,000.

The American Panel Company has been incorporated at Cattaraugus, N. Y., with a capital stock of $30,000.

The Adams Lumber Company has been organized at Charleston, W. Va., with an authorized capital of $50,000.

At St. Louis, Mo., the Central Tie Company, with an authorized capital of $150,000, has been incorporated.

The Natural Wood Manufacturing Company at Biddeford, Me., has been incorporated, and has a capital of $50,000.

The Century Woodworking Manufacturing Company, St. Louis, is involved in a voluntary petition in bankruptcy.

The Mercantile Tie & Lumber Company has been incorporated at Kansas City, Mo., with an authorized capital of $10,000.

The plant of the Rock Island Sash & Door Works, which was destroyed by fire recently, will be rebuilt at Rock Island, Ill.

With a capitalization of $10,000, Ed. J. Schlamp and others have formed the Henderson Buggy Company of Henderson, Ky.

It is stated that T. H. Vaughan of the Wabash Cabinet Works, Wabash, Ind., will have plans prepared for a new cabinet plant.

The Embury-Martin Lumber Company, Cheboygan, Mich., has sustained the loss of S. Harris Embury, who died recently at Cheboygan.

The Bell Manufacturing Company has been organized at West Monroe, La., with a capital stock of $50,000, and will manufacture lumber.

J. G. Pape, M. A. Stearns and others have incorporated as the Pape-Clair Wood Products Company at Lima, O., with a capital of $15,000.

The Coulson Lumber Company is the style of a new company at Memphis, Tenn. This concern will deal in hardwoods and has a capital stock of $14,000.

A hardwood finishings plant is planned by the Gibbons Manufacturing Company at Clarksville, Tex., which concern has recently been incorporated there.

The Miller Lumber & Manufacturing Company has been incorporated at Cotton Grove, N. C., and will manufacture chair stock. Its capital stock is $125,000.

A new furniture factory is to be erected at Nashville, Tenn., by the Fletcher Manufacturing Company, of which E. H. Fletcher, McMinnville, Tenn., is president.

The Hartfield Veneer, Basket & Manufacturing Company has been incorporated by Frank H. Burrows, Alvan Eades and others at Hartfield, N. Y., with a capital stock of $15,000.

The Stearns Salt & Lumber Company of Ludington, Mich., experienced a $25,000 fire loss last week, fire destroying the panning house in connection with the salt works of the company.

George H. Becker's interest in the Traverse City Casket Company, Traverse City, Mich., has been bought by Charles Reubekam, and additions to the company's plant are being planned.

An interest in the business of the Southern Desk Company, Hickory, N. C., has been purchased by G. F. Ivey, and the company is planning to increase its capital stock and to improve the plant.

The Martina Mosaics Company has been formed at Cincinnati, O., with a capital of $15,000, for the manufacture of flooring. John Martina, Massino Orland, Gaetano Martina, Cesare Martina, Ottila Ornelia and Luigi Martina are the parties at interest.

CHICAGO

Among the recent visitors in the Chicago trade were June Allen of the I. M. Darnell Son Company of Memphis, and E. T. Bennett of the Bennett Hardwood Lumber Company, Memphis, Tenn.

Robert Sullivan of the Timber Products Company, Chicago and New Orleans, sustained a fracture of one of his ankles while at the plant of the Hammond Lumber Company, Hammond, La. He was brought home to Chicago, and it is expected he will be laid up for several weeks to come.

C. S. Gladden, one of the old manufacturers and wholesalers of hardwoods at Memphis, spent several days of last week with the local trade.

The United Piano Companies has been incorporated with a capital stock of $25,000 at Chicago.

F. E. Stonebraker, prominent in lumber circles in Memphis, Tenn., spent several days of last week in Chicago. Mr. Stonebraker came North to see one of his boys off to Cornell, and while in town took advantage of the opportunity to do some business.

George D. Burgess of Busse & Burgess, Inc., Memphis, spent several days of last week in Chicago on business.

J. V. Stimson of Huntingburg, Ind., spent most of last week in Chicago. While in the city Mr. Stimson attended the meeting of the board of directors of the National Hardwood Lumber Association, and also spent a little time on business in connection with his varied interests in the hardwood field.

J. M. Thompson of the J. M. Thompson Lumber Company of Memphis, Tenn., spent the latter part of last week in the Chicago and adjacent territory on a business trip.

J. M. Pritchard of the J. M. Pritchard Lumber Company of Memphis, was in Chicago last week in attendance at the meeting of the board of directors of the National Hardwood Lumber Association.

F. F. Fee of the Fee-Crayton Hardwood Lumber Company, Dermott, Ark., was in Chicago for several days of last week. Mr. Fee has just returned from an extended trip abroad.

W. B. Burke of the Lamb-Fish Lumber Company, Charleston, Miss., accompanied by Mrs. Burke, has been stopping at the Chicago Beach Hotel for about a week. Mr. and Mrs. Burke came to Chicago about two weeks ago accompanied by their son whom they placed in a local school. Mr. Burke then making a week's trip to New York.

D. J. Peterson, prominent in lumber circles of Toledo, O., was in town the latter part of last week. Mr. Peterson is planning to spend the greater part of the winter with his wife in California.

W. N. Kelly of Detroit, Mich., was one of the prominent visitors to the local market recently.

William Wilms of the Paepcke-Leicht Lumber Company, Chicago, returned about a week ago from an extended trip to Europe.

The Harris Brothers Company has succeeded the Chicago House Wrecking Company, Chicago, Ill.

The Illinois Refrigerator Company, Morrison, Ill., has increased its capital stock to $40,000.

J. B. Wall, president of the Buffalo Hardwood Lumber Company, Buffalo, N. Y., spent a few days of this week in Chicago on his way to Wisconsin and upper Michigan mill points.

C. M. Carrier of the Carrier Lumber & Manufacturing Company, Sardis, Miss., who resides at Buffalo, N. Y., spent several days the early part of this week in Chicago.

NEW YORK

Because of poor health and ocular trouble Robert Lloyd is selling out the stock on hand and will close the business conducted as Wm. Gibson, Inc. The business has been in heavy hardwood specialties such as wagon stock, and the name has been identified with the trade of the city for over sixty years.

F. R. Babcock, prominent lumberman of Pittsburgh, was a visitor in New York last week.

C. A. Goodman, lumberman of Marinette, Wis., arrived in New York last week on his return from Europe.

R. L. Black, formerly of the local hardwood trade but now with Caflisch Brothers, hardwood manufacturers and wholesalers with headquarters at Buffalo, was in New York last week on a business trip.

H. D. Billmeyer of the Billmeyer Lumber Company, Cumberland, Md., spent several days in New York the middle of the month. He reports a good volume of business in heavy oak ship stock.

Chester F. Korn of Korn-Conkling Company, Cincinnati, sailed on the Imperator for Hamburg last week. He will be gone about two months, touring the foreign hardwood markets.

Thos. F. Smouse, hardwood manufacturer and wholesaler of Cumberland, Md., was among visiting lumbermen in New York recently.

Sam E. Barr, the popular hardwood wholesaler, returned on Sept. 13 from a trip to mills whose output he handles in this section.

BUFFALO

On September 16 in the Chapel of the Blessed Sacrament Miss Helen Johonnot, of Cincinnati, formerly of Buffalo, was married to J. Howard Wall, son of J. B. Wall, the lumberman and police-commissioner. Miss Gertrude Wall was maid of honor, Maurice Wall, the best man, and Howard Wall and Richard Welsh, ushers. After the ceremony a breakfast of forty covers was served at the Buffalo Club. Mr. and Mrs. Wall have gone for a southern trip and will reside in Buffalo, Mr. Wall holding a position with the Buffalo Hardwood Lumber Company.

As the result of the efforts of the Terminal Commission, of which J. N. Scatcherd is a member, an agreement has been reached with the Lackawanna Railroad Company for a new passenger station and other improvements at the foot of Main street, to cost about $5,000,000. Some objection has been raised to the plans, it being claimed that the railroad gets more than the city under the agreement.

The Lehigh Valley Railroad Company has also agreed to build a new station and the preliminary work has started. It will be pushed as rapidly as possible. The new station, like that of the Lackawanna, will be a great ornament to the foot of Main street. It will take several years at least in order to complete the work.

F. M. Sullivan and his family have been spending about ten days this month in an automobile tour through New England, and report having had a very enjoyable trip.

Anthony Miller states that the hardwood trade is a little better this month than last, although improvement is slow. His yard is receiving stocks of basswood, ash and maple.

The National Lumber Company states that maple flooring shows some stiffening in prices, especially in No. 1 grades. General hardwood prices are firm, particularly in oak.

G. Elias & Bro. report fairly good sales in hardwoods. Northern stocks are not being brought to the yard this season, owing to the fact that prices are too high at the mill points.

O. E. Yeager's yard is receiving stocks of maple, oak and birch. Trade is reported better this month and the outlook is considered good for business this fall.

I. N. Stewart & Bro. have been selling fair stocks of various hardwoods this month and report an increased sale for cherry, although plain oak remains the leader.

The A. J. Chestnut Lumber Company has lately extended its purchase of the cuts of hardwood mills in Pennsylvania and is looking also to the Adirondacks for more stock.

S. B. Taylor states that his recent purchase of semi-park property in the vicinity of New Albany, Ind., was not as badly damaged by last spring's Ohio river floods as was figured. He has lately joined with others in the purchase of a hardwood timber tract in West Virginia.

The Buffalo Hardwood Lumber Company yard is busy handling birch receipts which recently came in by lake to the extent of about 1,000,000 feet. The demand is reported good for this lumber.

James A. White, of the W. H. White Company, has been quite ill for about ten days as the result of ptomaine poisoning. He has partly recovered and has gone to Muskegon to meet the steamer Arizona, which takes a lumber cargo to that once-famous lumber port.

PHILADELPHIA

J. Gibson McIlvain, Jr., of J. Gibson McIlvain & Co., reports a fair volume of business right along considering time of year, and is optimistically inclined as to the outlook. The Woodcliff Lumber Company, owned by this house, is moving its mill at Monterey, Tenn., to a recently acquired timber tract in that state, which is said to comprise some very fine poplar and oak. It promises to soon ship some of the finest wide quartered oak ever placed on the market.

Frank E. Schofield of Schofield Brothers says his firm has no complaint whatever to make of conditions. It is getting good orders right along and is shipping stuff as fast as the mills can get it out.

J. W. Floyd of the J. W. Floyd Lumber Company reports a decided gain in business over a fortnight ago, although buying still continues conservative in some lines. The feeling in the trade is better and the outlook more favorable.

Horace A. Reeves, Jr., has returned from a most invigorating outing at Rye Beach, N. H., where he spent most of his time motoring through the beautiful country.

The Henry H. Sheip Manufacturing Company reports the cigar box lumber business rushed to the extreme. The general lumber business, however, recuperates more slowly from the usual summer inertia.

Charles F. Felin & Co. reports business so far ahead of last year—orders for building supplies in large volume, with prospect of advanced trading with the advent of cooler weather.

S. H. Pancoast, formerly salesman with W. H. Fritz & Co., is now with the Whiting Lumber Company and will cover the territory in the coal region.

Stroud & Wilgus, wholesale hardwoods, are gradually getting their new yard in shape at Beach and Palmer streets, and will soon be in a position to move their offices to the new building there. They will have a capacity of from 5,000,000 to 6,000,000 feet of hardwood lumber. They report business improvement slow but positive.

F. A. Dudley, president of Sterling Lumber Company, has just returned from an extended vacation trip in the White mountains, from which he has derived much benefit. It was his first respite from business for a number of years. He reports things looking a little brighter and the outlook promising.

Edward F. Henson of Edward F. Henson & Co. says last month's business was the dullest they have had this year, but things now are running about normal and they are hopeful as to outlook.

G. G. Barr of Beecher & Barr, Pottsville, Pa., will hereafter have personal charge of their New York office at 1 Madison avenue. H. S. Bond of this house will take care of the Philadelphia office.

Charles Atherton of Charles Atherton & Co. reports increased inquiries, some of which result in good orders, but on account of a keen competition the profit is at times reduced to lowest margin. Stocks generally are low but buying continues conservative in character.

John G. Uzzell, one of the old-time famous lumbermen and recently proprietor of the Uzzell hotel, Bellefonte, Pa., died on Sept. 9, aged eighty years.

The steam mills and planing factory of the James T. Young & Sons Mills, Pocomoke City, Md., were destroyed by fire Sept. 12. Much of the lumber was saved.

PITTSBURGH

The Pittsburgh Wholesale Lumber Dealers' Association resumed its weekly luncheons last Tuesday, Sept. 16, at the Duquesne Club. A number of matters are on tap which are likely to call for immediate action soon, and it is probable that several members will be added in the near future.

The Pennsylvania State Forestry Commission has bought 4,000 acres more land in Lycoming and Clinton counties. It has already received over 150,000 acres of pulpwood which is available on this reserve land, and the funds for it will be turned over to the school authorities of the state.

The Kendall Lumber Company had the most encouraging summer in all ways probably in its history. Its trade with the coal mining and railroad companies, according to its sales manager, G. C. Chambers, has been away beyond its average business in this line.

The Allegheny Lumber Company reports business at present a little quiet, although its trade during the summer was very satisfactory. This concern also notes that prices for stock used by window glass companies are being cut below the margin of profit.

The West Virginia Lumber Company has added a new salesman, W. W Adams, who will represent it among the West Virginia buyers. This company is doing a nice business at its mills in northern Pennsylvania, but finds that hard effort is needed to get good orders.

E. H. Shreiner of the E. H. Shreiner Lumber Company is spending this week in West Virginia among the mills. He has made two or three very successful trips to Canada this summer which resulted in some nice orders from the Canadian factories.

Joseph W. Cottrell Lumber Company, which was lately incorporated, and which has its offices in the Ferguson building, has a very nice hard wood operation on the M. & K. railroad in West Virginia. It is handling considerable oak bill stuff from its branch office in Uniontown, Pa., which is in charge of J. H. Rush. The company has been doing a good business in mining stock all summer.

C. E. Breitwieser & Co. are well pleased with the outlook for hardwood business and especially with the trade they have secured the past few months. Frank Smith of this concern has been in the East quite a large portion of the time the past two months, and has rounded up some very satisfactory business.

The Meyers-Parsons Lumber Company is carrying splendid stocks of lumber and is getting its full share of the business. The tendency to cut prices, according to its officials, is confined mostly to yellow pine people.

Never before in the history of Pittsburgh lumber firms has there been such a demand for medium and low grade hardwood for mining purposes. The large number of new coal mining and coke making operations that are being opened up all over the country have stimulated this trade greatly of late. Industrial business has also been fine the past summer. So many new plants are being erected and extensive improvements have been authorized in so many cases that hardwood men have thrived on this business.

BOSTON

David P. Page, for fifty years a member of the firm of David Page & Co., manufacturers of builders' fancy interior finish, Charlestown, Mass., died at his home in Somerville, Mass., Sept. 18, of heart disease. Mr. Page was a charter member of the Master Builders' Association. Mr. Page retired from active business about six years ago.

Grant T. Stephenson
Constructing Engineer

Wood Distillation Plants *for* Utilization of Wood Waste

WELLS, MICHIGAN

On the Following Stock We Will Make Special Prices for Prompt Shipment:

82,000' 2" No. 2 Common Poplar.
10,000' 1¼" No. 1 & 2 Qtd. Poplar.
20,000' 1x24" & up No. 1 and Panel Poplar
40,000' 3" No. 1 & 2 Poplar
15,000' 4" x 18 to 30" No. 1 & Panel Poplar
30,000' 4" x 7 to 25" No. 1 & 2 Poplar
35,000' 5/8 x 18" & up No. 1 & Panel Poplar
117,000' 6/4 S. W. & No. 2 Common Chestnut
38,000' 1 x 12" & up No. 1 & 2 Chestnut
58,000' 1" No. 1 Com. Chestnut
47,000' 5/4 No. 1 Com. Chestnut
58,000' 6/4 No. 1 Com. Chestnut
36,000' 8/4 No. 1 Com. Chestnut
28,000' 4/4 No. 1 & 2 Com. Chestnut
41,000' 5/4 No. 1 & 2 Com. Chestnut
69,000' 6/4 No. 1 & 2 Com. Chestnut
12,000' 6/4 No. 1 & 2 Red Birch
19,000' 8/4 No. 1 & 2 Red Birch
86,000' 3" No. 1 & 2 Red Birch
6,000' 4" No. 1 & 2 Red Birch
21,000' 5/4 No. 1 & 2 Cherry
10,000' 8/4 No. 1 & 2 Cherry
88,000' 4/4 No. 1 Common Cherry
19,000' 5/4 No. 1 Common Cherry
10,000' 8/4 No. 1 Common Cherry

The Atlantic Lumber Co.
70 Kilby Street, Boston, Mass.

Jason Robinson, Jr., of Derry, N. H., has purchased the woodworking business of Fred I. Clark of that town.

The plant of Nathan A. Weston, who has been operating a sash and blind factory at Madison, Me., was destroyed by fire recently. The loss to the shop and machinery was $5,000.

A petition in bankruptcy has been filed against the Shaw Lumber Company, Boston, by three creditors.

At the meeting of the Lumber Manufacturers' Association of southern New England, recently held at Rocky Point, the following officers were elected: President, C. E. Child, Putnam, Conn.; vice-president, C. M. Ely, Manchester, Conn.; secretary and treasurer, C. A. Tillinghast, Davidson; directors for three years, O. P. Hallbourg, Westfield, Mass.; P. L. Lathrop, Rockville; director for one year, Thomas H. Barber, Arcadia, R. I.

The three-story wooden factory building in Portland, Me., occupied by W. A. Allen & Co., manufacturers of wood mantels, etc., has been practically destroyed by fire, causing a loss of about $25,000.

BALTIMORE

Another large shipment of mahogany logs from South Africa arrived in Baltimore aboard the steamer Templemore of the Johnston Line on Sept. 18. One consignment consisted of 114 logs and another of 169 logs. All of them were destined for western points, presumably being intended for use in the manufacture of furniture. The logs were transshipped at Liverpool.

With an allowance of twenty per cent for under valuation, the cost of real estate improvements for which permits were issued during August in Baltimore amounted to not less than $1,176,183.00. This total, which is the third largest for the present year and is held to make a very encouraging exhibit, consisted of $745,153 on account of new buildings, $75,000 for alterations and $160,000 for additions. The aggregate for the eight months of the current year is not less than $9,710,610.60, which is well up to the record and compares favorably with the building activity that prevailed shortly after the great fire of 1904.

The Levinson & Zenitz Company, manufacturer of furniture on Gay street, near Baltimore, is about to replace the old buildings at 10 to 16 Frederick street with a new five-story concrete structure. The improvement is one of a number there contemplated in connection with the expansion of the company.

Secretary J. McD. Price of the National Lumber Exporters' Association, Knickerbocker building, was in New York recently to confer with various steamship line representatives in regard to freight rates and other matters in the interest of members of the organization. He expressed himself as well pleased with the result of his work.

M. S. Baer of Richard P. Baer & Co., in the tower of the Maryland Casualty building, is spending week-ends at Atlantic City, where his family is taking an outing.

A meeting of creditors of the Broadbent Brothers Company, manufacturers of mantels and tables, which went into the hands of a receiver some weeks ago, was held Sept. 19, when a proposition was made by the company to pay a dividend. The creditors are disposed to accept the offer, but insist upon a guarantee that the dividend will be paid. It appears that the company has been carrying on operations at a loss, the deficit so far for the present year being put at $21,000. Much of the increase in cost is chargeable to the higher outlay for material and the greater wages demanded. Thus, to turn out tables to the value of $1,000 more than last year, entailed an increase in expenditure of not less than $18,000. The affairs of the company appear to have been conducted with scrupulous exactness.

One of the visiting lumbermen here during the last ten days was F. X. Diebold of the Forest Lumber Company of Pittsburgh, Pa. Mr. Diebold stated that the hardwood trade situation was in the main quite encouraging and that he had taken a considerable number of orders.

COLUMBUS

The offices and main warehouse of the Stine & Ervin Lumber Company of Bryan, O., were destroyed by fire recently causing a loss of $18,000, partially covered by insurance. The fire burned 300,000 feet of lumber.

The plant of the Pilliod Lumber and Box Company, of Swanton, O., was destroyed by fire recently causing a loss of $25,000. One-fourth of the loss is covered by insurance.

J. W. Kitchen of the J. W. Kitchen Lumber Company of Ashland, Ky., was a visitor in Columbus recently.

J. R. Smith, formerly assistant manager of the Rumely Products Columbus branch, and W. D. Norton of the Columbus Sawmill Company have organized the Crestview Lumber Company to open a retail yard in Crestview, a suburb of Columbus. The location for the yard has not yet been selected. W. D. Norton has been elected president and general manager and J. R. Smith, secretary of the concern. Hardwoods will be the principal product handled.

The city council of Columbus has taken steps for the submission to the voters at the fall election the proposition to issue $8,500,000 bonds to carry out a plan of flood prevention and thus protect the west side of Columbus. Engineer Alvord submitted ten plans for flood prevention which range in cost from $6,000,000 to $23,000,000. Plan No. 7, providing for an expenditure of $12,000,000 has been accepted and the city's share of the cost is $8,500,000.

R. W. Horton, sales manager for the central division of the W. M.

Ritter Lumber Company, says there is a good demand for hardwoods both from manufacturing plants and the retailers. The volume of business is as good as could be expected and better than last season at the corresponding time. Prices are holding up well and no weakness of any consequence has developed. The car supply is not troublesome at this time.

Manager Hodil of the Virginia Lumber Company says the market is spotty at this time. In one section there is a pretty fair demand and it is slow in other places. He says the car shortage is not bad, although it is expected that it will grow worse soon.

Secretary Benbow of the Sowers-Leach Lumber Company says trade in hardwoods is holding up well and prices are well maintained. Stocks are not plentiful in any section.

L. B. Schneider, sales manager of John R. Gobey & Co., says trade is good in all varieties and grades of hardwoods. He says it is still too early to look for the natural fall increase in the volume of business. Prices are ruling about the same and no weakness has appeared.

J. A. Ford of the Imperial Lumber Company says trade is fair with his concern although some shipments are delayed by the car shortage.

INDIANAPOLIS

I. B. Anderson, for twenty-five years a lumber dealer at Westfield, died on Sept. 9. He was seventy-three years old.

Lawrence Maxwell of Cincinnati has bought at receiver's sale for $80,000 cash the plant and property of the Krell Auto-Grand Piano Company at Connersville, and will operate the plant.

News has been received here of the death at Haymarket, Va., on Sept. 14, of Leland T. Depauw, who was a director in the New Albany Veneering Company, New Albany.

James W. Wheeler, who has large lumber and timber interests in Indiana, Arkansas and Tennessee, is seriously ill at his home in Noblesville, and it is feared he cannot recover.

The Lumbermen's Social Club of Terre Haute has been incorporated under the Indiana voluntary association act without capital stock. The incorporators are Louis D. Walker, Charles F. McCabe, Charles E. Pierson, Fred H. Harring, August Fromme, Adam Snider, Raymond H. Kintz, Charles L. Runnyan, W. F. Stuebe, H. B. Gruenholz, W. B. Steele, E. D. Armstrong and John F. Schwartz.

With an authorized capitalization of $12,600, the Jasper Desk Company has been organized and incorporated for the purpose of taking over the business at Jasper conducted for many years by the Jasper Furniture Company. All of those interested, with the exception of Josephine Bauer of Indianapolis, are residents of Jasper.

A trade extension trip to thirty-seven southern Indiana cities and towns was made by local manufacturers and jobbers under the auspices of the wholesale trade division of the Indianapolis Chamber of Commerce, Sept. 19, 20, 21 and 22. The party spent Sunday at French Lick. The trip was made on a special train.

NASHVILLE

W. H. Weller, secretary of the Hardwood Manufacturers' Association of the United States, with headquarters at Cincinnati, stopped in Nashville a few days recently. Mr. Weller has been making his annual tour of leading hardwood markets, and says that he finds hardwood manufacturers in all sections optimistic as to the future. He stated that the association is gaining in strength and is in a prosperous condition. Mr. Weller said that it has not yet been decided where the association will hold its next annual convention, but it will probably be in Cincinnati.

The reorganization of the Edgefield & Nashville Manufacturing Company under the name of the Morford-Baxter-Ragland Company, promises to give strength to the new company. Charles M. Morford, president of the Nashville Lumbermen's Club, is now president of the new company, which is going out after business on a large scale. A contract has been secured for an eleven-story addition to the Seelbach hotel at Louisville, and other business that will be sufficient to keep the company going for six months. This company is one of the largest building manufacturing concerns in the South, employing about 400 men. The company also manufactures fine hardwood furniture.

The planing and sawmill of Joseph Gunn at Rutledge Falls, Coffee county, were totally destroyed by fire, causing a loss of $5,000 with no insurance. Mr. Gunn's plant was destroyed by fire about a year ago, and he has been a heavy loser in this way. He says that he will rebuild at once.

MEMPHIS

W. H. Kennedy, president of the Kennedy Heading Company, New South Memphis, has sufficiently recovered from the recent injuries received in an automobile wreck to be at his office again. Last week he held a birthday dinner at his home which was attended by a large number of members of the immediate family and connections.

Leroy Halyard has become assistant to J. H. Townshend, general manager of the Southern Hardwood Traffic Bureau. He brings to his new position a large experience in the handling of traffic matters, having been connected for some years with the traffic department of the Illinois Central. He succeeds M. R. Beaman, who has gone to Washington to accept employment in a traffic bureau at that point.

The Bliss-Cook Oak Company has recently made extensive improvements at its plant at Blissville, Ark., including an addition to its planing mill department and a decided increase in its capacity for kiln-drying.

The plant of the Clarksville Basket Company, Clarksville, Ark., is now running on full time and is making not only baskets but also all sorts of crates for handling peaches, apples and other fruits. The management believes that it will be possible to supply the entire needs of the fruit growers and therefore plans to run the entire year.

The sawmill of the Hope Lumber Company near Hope, Ark., was destroyed by fire a short time ago. The loss was $15,000 and it is reported that no insurance was carried.

A number of prominent column manufacturers held a meeting in Memphis last week at which preliminary steps were taken for the perfection of a national organization embracing the principal companies engaged in this line. R. W. Williams, manager of the Williams Column Company, Sheffield, Ala., said that there were a number of matters that could be handled much more satisfactorily through such an organization than through individual effort. He referred particularly to transportation and

CINCINNATI
Hardwood Manufacturers and Jobbers

JAMES KENNEDY & CO., Ltd.
OAK, POPLAR AND OTHER HARDWOODS
FIRST NATIONAL BANK BUILDING

The Kosse, Shoe & Schleyer Co.
WALNUT, OAK, AND OTHER HARDWOODS
103-4-5 CAREW BUILDING

OHIO VENEER COMPANY
Manufacturers & Importers FOREIGN VENEERS
2624-34 COLERAIN AVENUE

KILN DRIED OAK
AND OTHER HARDWOODS
are one of our many "specialties" which are so satisfactory to others. Why not you?
Might pay you to get in touch with us. It has others
THE M. B. FARRIN LUMBER CO.

CONASAUGA LUMBER CO.
MANUFACTURERS HARDWOOD AND PINE
FOURTH NATIONAL BANK BUILDING

Johns, Mowbray, Nelson Company
OAK, ASH, POPLAR & CHESTNUT
GUM AND COTTONWOOD

C. CRANE & CO.
MANUFACTURERS HARDWOOD LUMBER
1739 EASTERN AVENUE

DAY LUMBER & COAL CO.
Mfrs. YELLOW POPLAR and WHITE OAK
GENERAL OFFICE—CLAY CITY, KY.

RIEMEIER LUMBER CO.
OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

SHAWNEE LUMBER CO.
HARDWOODS, WHITE PINE and HEMLOCK
Sales Office—South Side Station—C. H. & D. R. R.

allied problems. The organization is to be known as the National Colonial Column Association. J. L. Fetterman of the Weis & Lesh Manufacturing Company, Jackson, Tenn., was one of those who participated in the meeting here. Others were: B. McGregor of the Itta Bena Column Company, Itta Bena, Miss.; A. E. Jackson of the Florence Column Company, Florence, Ala.; C. Bryson of Bryson, N. C., and J. A. Sturfield of the Enterprise Lumber Company, Corinth, Miss.

Bluestone Land & Lumber Company
MANUFACTURERS
WEST VIRGINIA HARDWOODS
Soft White Pine, Oak, Poplar, Chestnut, Hemlock
Band Sawed Stock
MILL FACILITIES COMPLETE PLANING
RIDGWAY PENNSYLVANIA

MEMPHIS

E. Sondheimer Co.
Wholesale Manufacturers and Exporters
RED GUM
SAP GUM
COTTONWOOD
CYPRESS
ASH
PLAIN OAK
QUARTERED OAK
HICKORY
SOFT ELM
SYCAMORE
All Grades and Thicknesses
We make a specialty of mixed cars of Sap and Red Gum, One-half to Two inches thick.

VANDEN BOOM-STIMSON LUMBER COMPANY
Manufacturers Southern Hardwoods
Red Gum a Specialty
Memphis Tennessee

TIMBER ESTIMATES
REPORTS INCLUDED
TOPOGRAPHICAL MAP, DETAIL ESTIMATES & WRITTEN REPORT
GARDNER & HOWE
ENGINEERS
Clarence W. Griffith Department Manager, Porter Building. Memphis, Tenn.

The Mossman Lumber Co., Inc.
Manufacturers
plain and quartered red and white oak, ash, gum and poplar.
ALSO FULLY EQUIPT DIMENSION PLANT
Memphis, - - Tenn.

LOUISVILLE

Several new members have been added recently to the ranks of the Louisville Hardwood Club. They include the North Vernon Lumber Company, the Anderson Veneer & Sawmill Company and the Kentucky-Indiana Hardwood Company. The first two operate mills and the latter a wholesale yard. They will be represented in the club by Charles Platter, August Kahler and Herbert Bauman, respectively.

The members of the Nashville Lumbermen's Club will journey to Louisville about the middle of October for the purpose of accepting the hospitality of the Louisville Hardwood Club. The latter has asked that the Tennesseans return the visit which the Louisville lumbermen enjoyed to Nashville last spring, and the Lumbermen's Club of the southern city has indicated that it will gladly avail itself of the opportunity.

The exhibit of the Louisville Hardwood Club at the Kentucky state fair, held in Louisville, September 15-20, attracted wide attention. It formed the main portion of the forestry exhibit arranged by J. E. Barton, the state forester. Over thirty varieties were represented, and until they were labeled during the latter part of the fair week, some interesting and rather amusing efforts were made by the public to decide what woods were represented. Few, for instance, recognized the persimmon board which was shown, the coloring and figure of this wood being strange even to the average lumberman.

A discussion of the cost of doing business marked a recent meeting of the Hardwood Club. T. M. Brown of the W. P. Brown & Sons Lumber Company, who has had experience in both the manufacturing and wholesaling end of the business, leading the discussion and presenting some figures taken from his own records. Other lumbermen indicated what their costs for various operations were, and the interchange of information proved helpful to everybody present.

Congressman John Langley is endeavoring to interest the War Department in a plan to rid the upper Big Sandy river of stumps. The snags have caused considerable timber losses.

George S. Wood of Chicago, manager of the Forest Products Exposition, was in Louisville last week talking to local lumbermen about the project.

P. G. Booker, president of the Booker-Cecil Company, is out again after having been laid up over three months with typhoid fever. Mr. Booker is rapidly recovering his strength and will soon be in tiptop shape.

The Edward L. Davis Lumber Company is continuing the operation of its mill at night, having piled up a lot of logs which it is anxious to get out of the way.

The Interstate Commerce Commission held a hearing in Louisville, September 24 for the purpose of taking evidence in the complaint filed by the W. P. Brown & Sons Lumber Company and other local hardwood concerns against the Louisville & Nashville railroad, involving rates on that line north of Decatur, Ala., recently advanced. The case affects Evansville and Cincinnati directly, as both cities are named in the tariff which was objected to.

The sawmill of the Beaver Lumber Company, recently organized at Ashland, Ky., will be located in Lawrence county, it is reported.

Most of the country mill operators have discontinued for the season, it is generally reported. The dry weather which marked the summer made teams and labor plentiful and enabled a lot of timber to be gotten out and worked up; but the slack demand during the past month or two caused many of the small operators to discontinue.

ST. LOUIS

The car shortage, as a rule is not quite so serious this season as it was last, but there are still many sections where there are long delays in getting out shipments. In other sections, the delays are only slight. The carriers as well as the shippers are using every effort to reduce the delays, in the way of unloading, etc.

R. U. Fletcher, vice-president of the Hooton Hardwood Lumber Company, is on a buying trip in the South. Mr. McRoberts, sales manager of the company, has just returned from a trip through Iowa and northern Illinois. He brought in some good orders.

W. W. Dings of the Garetson-Greason Lumber Company visited the mills of the company last week. On his return he stated that the new mill being erected at Wasson, Ark., will soon be in operation.

F. H. Smith of the Smith-Sueme Lumber Company is back from his vacation, which he spent in the North. He says that just at present business is a little quiet owing to the weather conditions but he looks for considerable improvement in the near future.

There is a pretty fair demand for gum and oak, reports E. H. Luehrmann of the Chas. F. Luehrmann Hardwood Lumber Company. He says there is also a good call for the other items on the hardwood list and the call is getting better all the time. The company is in good shape to take care of business, as it has a large and well assorted stock on hand.

L. M. Borgess of the Steele & Hibbard Lumber Company, who is on a selling trip in Iowa and Minnesota, is sending in some nice orders. He wrote that while the line yards and the consumers are buying fairly well, they are not placing the orders they should with the stocks so low and poorly assorted.

Thos. E. Powe of the Thos. E. Powe Lumber Company says there is a seasonable demand for oak, poplar, ash and cypress. Prices are keeping up quite well. The business has developed quite rapidly and Mr. Powe says there is considerable of an increase over sales of a year ago.

MILWAUKEE

The labor market in Wisconsin has been declining steadily for several months and a further slackening of the demand for help is in sight, according to a statement of the Wisconsin Industrial Commission, under whose direction the Wisconsin Free Employment Bureau operates. Lumber companies are still in the market for men to work in the logging camps and for marsh and swamp work. In Milwaukee and Superior the number of men seeking positions exceeds the demand. Common laborers exceed the demand for skilled men. The free employment offices in Milwaukee, Oshkosh, Superior and La Crosse placed 2,299 persons last month, of which 1,922 were men and 367 women. 4,500 persons were sent to employers in answer to about 5,000 calls.

The special legislative committee on state forest reserve met in the Republican house in Milwaukee recently. Surveys of the land in northern Wisconsin, now considered for the forest reserve, will be begun within a short time. Arguments are being received on both sides of the question whether the land purchased by the state is better suited for agricultural purposes than for a reserve. The committee will hold several meetings at different towns in the forest reserve section during the coming winter. A meeting will be held at Woodruff, which is in the heart of the forest reserve country, on Oct. 21. State control of the shores of the many lakes in the section will form an important subject for consideration by the committee. The report on the investigations of this committee will be made to the next Wisconsin legislature in 1913.

The Kellogg Brothers Lumber Company, Grand Rapids, is erecting one of the most modern and finest lumber sheds in the state. Two tracks run the entire length of the shed. The exterior work is now practically completed and the interior is being rushed so as to have the entire work completed by the end of this month.

The Jacob Mortenson Lumber Company, Wausau, has acquired a large tract of timberland from Kate Pier of Milwaukee. The timber is located in Lincoln county near what is known as Schultz spur. The logs will be cut this winter and shipped from Coombs station. L. P. and T. A. Johnson of Merrill have the logging contract.

Improvements are being completed at the plant of the Upham Manufacturing Company at Marshfield, which will give the plant one of the largest and finest dust and refuse collector systems.

The Paine Lumber Company of Oshkosh, which is among the largest sash and door manufacturers in the world, is considering moving at least part of its plant from Oshkosh to Langdale county. The reason for removal is to get nearer the standing timber which is sawed at its mill. Originally the logs were brought to the mill at Oshkosh by the Fox and Wolf rivers, but now they are being shipped by freight. Charles Nevitt, treasurer of the company, is quoted as saying that the removal has been under consideration for a long time and sooner or later a part of the Oshkosh plant must be placed in Langdale county, while the removal of all of it is possible. A year ago a corporation was organized as a step in that direction.

The Faust Lumber Company of Antigo will continue its sawmill operations until late this fall. The daily cut averages 60,000 feet, and when completed the run will reach 8,000,000 feet. The concern was organized last winter. The shipments at present are fourteen carloads per week, which keep the planing, lath and shingle mills working full blast. As soon as the operations cease this fall, improvements will be made to increase the capacity.

Summer logging operations have been discontinued by the Kaiser Lumber Company, operating at Stinson Spur, and the Hines Lumber Company, operating at Draper. The reason for this move is said to be due to the increased wages and lower lumber prices.

Logging operations have been suspended by the Park Falls Lumber Company, which throws five hundred lumber jacks out of employment. The Park Falls company is running its mill full capacity, however, and the reason for suspending logging is because of the large supply on hand.

The Reynolds Box Company has started operations at its box factory at Sturgeon Bay and will keep running until the stock on hand is cut up.

Employes of the Wisconsin Chair Company of Port Washington celebrated the twenty-fifth anniversary of the company on Thursday, Sept. 18. They presented the president, Frederick A. Dennett, with a silver service.

H. Emmett Redman, who thirty years ago came to Racine and became credit manager of the Mitchell-Lewis Wagon Company, and in late years secretary of the Mitchell-Lewis Motor Company, died Sept. 10 as a result of a stroke of paralysis.

The Hardwood Market

CHICAGO

The continued dullness is too evident in the local trade to be ignored. Of the various consuming factors in the hardwood market of Chicago the furniture factories have been the most active, but it seems that in a good many cases these people have become pretty well loaded up, and

The White Lake Lumber Co.
Peoples Gas Bldg., CHICAGO, ILL.
Northern and Southern Hardwoods
CAR STOCK
WHITE PINE YELLOW PINE
High Quality—Prompt Delivery
WE WANT TO MOVE AT ONCE
5 cars 4/4 No. 1 Com. Basswood
3 cars 4/4 No. 2 Com. Basswood
THIS IS WINTER CUT AND VERY GOOD
Send us your inquiries
2 cars 4-5-6-8/4 L. R. Sycamore
1 car 4/4 L. R. Southern Soft Maple

Wanted
ONE THOUSAND BUYERS OF
GUM — OAK — ELM
to write us at once for delivered prices on straight grades, dry stock, National Inspection.
We Want to Move at Once
3 cars each 5/8 and 3/4 FAS Plain Red Oak
5 cars each 4/4 Gum Boxboards, 13" to 17" FAS Sap, No. 1 Com. and No. 2 Com. Gum
LICKING RIVER LUMBER COMPANY
303 Dean Building SOUTH BEND, IND.

Saline River Hardwood Co.
Main Sales Office
Pine Bluff, Arkansas
Manufacturers of
Genuine Forked-Leaf White Oak
Red and Sap Gum
Red Oak and Ash
¶ We offer to the trade a remarkably SUPERIOR lumber product.
¶ Our TIMBER is virgin forest growth of the highest type.
¶ Our MILLS are new and produce accurately manufactured stock.
¶ Our LUMBER is all KRAETZER-CURED—treated with steam under pressure directly from the saw—insuring quick drying to light weight, freedom from seasoning defects and stick-marking, splits and stain.
¶ Kraetzer-cured lumber will "stay where you put it."
¶ Dry kiln and oak flooring plant in connection.
¶ We solicit the inquiries and orders of critical and discriminating buyers.
¶ For straight cars of Yellow Pine, or mixed cars with Oak Flooring, write LONG-BELL LUMBER COMPANY, Kansas City, Mo.

Mahogany and Circassian Lumber & Veneers

¶ The largest assortment of finest figured Mahogany Logs, Lumber and Veneers in the country can be found at the Chicago plant of C. L. Willey.

¶ We are just in receipt of fifteen cars of remarkably superior Circassian Walnut Logs, large size, well-figured and of good color, which are now being cut into Veneers.

¶ A visit or correspondence from discriminating buyers of all varieties of fine Imported and Domestic Cabinet Woods in Lumber and Veneer is solicited.

¶ You will not only find the Willey warehouses well stocked with a superb collection of Circassian, Mahogany, Vermilion, Black Walnut and other fancy foreign and domestic lumber and veneers, but buyers are assured of prompt and painstaking service, and a quality of product not usually obtainable.

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even in the face of an active furniture business they are not calling for any great quantities of hardwoods. Still there is a good deal of lumber moving locally, and while everybody is complaining more or less about the trade and conditions of trade, as a general thing there is anticipated a brisker demand for the first of the year. As is the case everywhere throughout the country the unusual political activity and the significance of various measures before the National House at Washington is ascribed as the predominating factor retarding business at present, but it is hoped that these influences will have worked themselves out within the next two or three months and that there will be a gradual resumption of activity.

As to prices—the local market is off, the most evident break being seen in connection with gum, which is still very dull. Chicago wholesalers are reporting more generous offerings in southern hardwoods, particularly from the southern states in the Mississippi valley territory, and this even applies to good stocks in dry oak. Oak prices are holding fairly firmly and no particular trouble is anticipated in this line, although it cannot be taken as a criterion of the general market.

NEW YORK

The lumber market is in about the same condition as other lines of activity that is, running along on a fair amount of business, which is just enough to keep the chronic panic-stricken ones from coming out in full bloom. It cannot be said that trade is satisfactory, for the volume is small for the season, but the price situation is a real bright spot in the lexicon. Buyers are not placing large orders and stocks on hand are below normal; but there is less bargaining for price concessions than would be expected under the circumstances. It is predicted that the market will show greater strength from now on, but until the money market becomes easier no startling improvement should be looked for.

BUFFALO

The hardwood dealers are doing a little more business this month than last, but sales are not on a very active scale. Indications are that sales will be about normal in the near future, although with the passage of the tariff bill some buyers ought to be in position to take quite an amount of stock. Purchases have been on a hand-to-mouth scale for so long that buyers have very little lumber on hand. The market holds quite firm, showing little change for the past few weeks.

Much of the demand is for plain oak, while quartered is not doing very much at present. Maple and birch are still among the leaders, while brown ash and chestnut are in fair demand. Poplar is rather slow, but the lower grades are not hard to sell, bringing a pretty fair price from the box manufacturers. Dealers have been getting in some rail stocks this month, but very little lumber is coming by lake.

PHILADELPHIA

There has been so little change in the hardwood situation during the last fortnight as to be almost negligible. Inquiries are more liberal, and buying in the country districts gives encouragement as to outlook. Yard business, especially in Philadelphia, is slow for this time of the year, and buying is on the hand-to-mouth order. Building work, although ahead of last year for the first eight months, is still far below expectation, but the more seasonable weather has apparently given a fresh impetus to operative building work, which has been somewhat delayed of late by the strikes in the carpenters' union, of which, fortunately, there are indications of an amicable settlement soon.

Prices, although wavering in some lines, are on the whole well sustained, and it is realized that the stock conditions at mill points will prevent any decided downward move for months to come. Furniture factories and other wholesale consuming industries continue fairly busy, but a conservative attitude as to buying is the rule. Railroads, although not placing large orders on the boards for future delivery, are in the market for ties and lumber for early consumption. Everything considered, the hardwood situation gives no uneasiness as there is a fair volume of lumber moving right along, and signs as to outlook are assuring. Foreign woods are in good demand, and veneer and mahogany trading continues active. The various hardwoods hold relative positions of a fortnight ago, with oak in the lead.

PITTSBURGH

There has been some slackening up in trade since the first of the month. It is attributed to the combined influence of the currency agitation, the tariff bill and the bad crop reports. Locally there is nothing in the situation to cause discouragement. Plants are running full and the steel industry made a more favorable report for August than for some time. Buying, however, on the part of large manufacturing interests is less urgent. Whether this spirit of dealing continues until Jan. 1 or whether there will be a pronounced gain in inquiries in the near future is a little uncertain. The fear of a car shortage is causing all purchasers of lumber to hurry up deliveries. Yard trade shows very little change. The building situation downtown is altogether the best it has been for six years. In the outlying sections building is not of sufficient volume to encourage retail lumber dealers.

BOSTON

The general demand for hardwood lumber has not been active during the past two weeks. Usually at this season of the year the consuming manufacturers of hardwood lumber are all busy and are cutting up large quantities daily. This season the plants are operating in a moderate way as a whole, and the manufacturer cannot be induced to purchase hardwood lumber far ahead of his requirements.

While the demand cannot be termed active, there appears to be enough business going around to keep the offerings very well sold up, so far as desirable grades and selections are concerned. The manufacturers of hardwood lumber are very firm in their views of the future. Practically all of the letters received in this market from manufacturing centers show that stocks are small and well held. The demand for quartered oak is very good and prices are firm and high. Plain oak has been selling in a very free way. There has been some inquiry for hickory in a small way. Offerings are small. Chestnut has been selling in a moderate way. There has been a fair demand reported for whitewood and ash.

BALTIMORE

Reports from hardwood men as to the state of the lumber trade are almost uniformly encouraging. While the general movement has not apparently exceeded moderate proportions, the demand has continued sufficiently active to absorb the output of the mills and to avert serious accumulations, while the range of prices has been such as to encourage the producers. Especially in the last week or two an appreciable increase in orders has come out, the numerous inquiries giving evidence of an active interest in stocks which promises to result in a decided expansion of the demand. All kinds of stocks appear to be affected by the favorable development and a most hopeful feeling prevails in the trade. During a part of August a slacking off in the volume of business was noted, but this has now yielded to a return to the former state of activity and there is every indication that the aggregate of the early part of the year will be approached if not exceeded. With respect to prices, also, the situation is satisfactory. Some items show a rather easier tone, and here and there a slight sagging in the range of values has developed, but in the main the returns leave no real cause for complaint and millmen as well as dealers are once more applying themselves with renewed energy to the work of getting business, confident that the results attained will be commensurate with the expenditure of effort.

Chestnut is holding its own fairly well, with the quotations rather stronger than they were during the summer, and with the requests for figures more numerous. Number 1 common oak is very much the same, with prices perhaps a dollar or two off, but with a kind of revival making itself felt. Northern buyers are purchasing in quantities that suggest an increasing consumption, and salesmen have met with gratifying results on their recent tours. Other sections of the country are hardly less responsive and there appears to be a quickening all along the line. Much the same can be said of poplar, which has been finding takers in sufficient numbers to take up the output of the mills, with only the lower grades at all halting, but with prices practically unimpaired.

The foreign trade, of course, is not so satisfactory, but the heavy curtailment of forwarding holds out a prospect that the exports also will show a stronger tone before long. Wagon oak planks and other kinds of stocks, including certain grades of poplar, are still offered abroad in such quantities as to keep the range of values relatively low. At the prevailing freight rates the exporters find it impossible to put down stocks on the other side at the prevailing current figures which will net them a profit, and a general realization of this fact has so checked the export movement that an early improvement is among the probabilities. Gum, basswood and some other kinds of lumber are comparatively strong, even in the foreign market, and there is every prospect that the buoyancy in them will continue.

COLUMBUS

The demand for hardwoods in Columbus and central Ohio has been fairly active during the past fortnight. All grades and varieties are moving uniformly and the list of prices is generally well maintained. The market is rather firm despite the weakness in yellow pine, and the prospects for the future are considered bright in every way.

Trade is about equally divided between manufacturing establishments and retailers. Both are buying steadily in small orders but neither are inclined to increase their stocks at this time. Their policy which is being followed is to buy only what is needed for immediate wants. Retail stocks are light and are not being increased. Stocks in the hands of factories are not large.

One of the worst features of the business is the growing car shortage which is holding up shipments to a certain extent. The shortage is probably the worst on the Chesapeake & Ohio, although other southern roads are having troubles. Shipments from mills in West Virginia are coming out fairly promptly.

Building operations in this section are still fairly active and this is quite a source of demand for hardwoods. The indications are good for a continuation of the demand right up to the bad weather. Contractors and architects are still busy preparing plans and figuring on construction work.

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of business pretty fair. Poplar is also moving well and all grades are in fair demand. Auto factories are buying the wide sizes. Chestnut is firm and the same is true of Basswood and ash. Other hardwoods are unchanged.

CINCINNATI

There is a decided optimistic feeling among the hardwood dealers at this point not because business right at this time is satisfactory because it isn't, although it has been worse before from many viewpoints, but because of the indications of more liberal purchasing on the part of the large buyers in the near future. Prices at present levels hold very firm and the tendency is for better rather than lower prices. There is a good inquiry for most stocks and a gradual increase in shipping is noticed everywhere. Conditions are healthy in manufacturing districts and dealers believe that purchases on a much more liberal basis are bound to come before long.

Except in the low grades there is very little activity in the poplar market. Stock appears to accumulate in the better grades gradually but has had no effect on prices which remain strong.

INDIANAPOLIS

The hardwood trade is approximately the same as it was this time last year, which condition is looked upon as encouraging, in view of the fact that many other industries are suffering a slight depression at this time. Few of the Indiana automobile factories are active at present. Furniture factories seem to be having a good run, and the furniture manufacturers say prospects for a large business during the fall and winter are good. Vehicle factories are not having a heavy trade. There has been no trouble from car shortage thus far.

Hardwood prices continue steady. Dealers are buying about as they need stuff.

NASHVILLE

There has been little change in the local hardwood market, though many of the manufacturers and shippers say that there are signs of improvement of trade. Prices rule steady. Most of the stock in this territory is in strong hands, and the owners are not willing to make any important concessions in prices. Plain oak is in good demand, with moderate dry stocks. There is a moderate demand for quartered oak. Ash is a ready seller. Chestnut and poplar are moving in a moderate way. The flooring market is in good shape, with local plants handling a good business. Box factories have had only moderate business.

LOUISVILLE

The demand for lumber has shown improvement during the past fortnight, and hardwood men regard the situation as essentially sound. While the scarcity of money, which has resulted in unusually slow collections, is a matter of general comment, it is believed that as soon as the crop movement has been completed and the money released by this action, buyers of lumber, as well as other business men, will find it easier to meet their obligations. The banks, on account of pending currency legislation, are not extending accommodations as generously as they might, and this, of course, is having its effect. Quartered oak continues a good seller, and prices are firm. Plain oak is also in good demand, especially the common grades, a slight falling off in the call for good plain being reported. Ash, which has been the big leader of the past season, has quieted down somewhat, probably due to an oversupply produced by many mills deciding to cut this wood more extensively. Hickory is extremely dull, as is chestnut. Red gum is showing improvement, and common poplar is also moving fairly well.

ST. LOUIS

The local hardwood business is of good proportion. While the orders as a rule are rather small for this time of the year, they amount up quite well in the aggregate, so the local distributors are pretty well pleased with the business they are doing. The principal item on the list at the present time is plain red and white oak. The latter demand is occasioned by the demand from the furniture factories and planing mills. There is also a free movement in ash and the prospects are quite bright for a still better call for this item. Red gum in the high grades is rather quiet but there is a fair movement in the lower grades. Cottonwood in the lower grades is in good request. Poplar is rather quiet. Prices on all items are being kept up quite well. Cypress is having a fair movement but the orders individually are rather small. The prices show no material change and are being pretty well maintained.

MILWAUKEE

Business in the local hardwood market is holding up well with demand especially good from the box manufacturers, who are buying well in low-grade stuff. The sash and door concerns are placing fairly good orders, although there is a disposition on their part to buy only enough to meet their present wants. The furniture trade is showing steady increase and the implement plants are in the market once more.

The fall building season is now well under way in this city, and wholesalers believe that this is bound to result in a better business from

now on. W. D. Harper, Milwaukee, building inspector, is confident that another new high record will be established this season. Wholesalers report that exceptionally good orders are coming in from most of the retail yards about the state. Farmers have been carrying on considerable fall building this year and dealers are endeavoring to get their stocks up in shape.

Northern hardwoods are holding especially firm and there is no indication that price concessions are to be expected. Stocks of southern hardwoods seem to be somewhat larger and there is more competition for orders in this line. Plain and quartered oak are in fair demand, although some buyers seem to feel that lower prices may be expected later. Reports from the northern lumber companies are to the effect that stocks at the mills are light. Dealers seem to feel that they may have trouble later on in replenishing their stocks and this is tending to keep prices up to the present mark. Stocks of birch and maple are far from being large at most points, while the demand for No. 1 and No. 2 common birch and for two-inch maple is increasing.

GLASGOW

For some time back the conditions in the timber trade in Glasgow and the west of Scotland have been rather slow. Selling has been uneventful. In most cases merchants have been toppling over one another in an effort to make small sales, which naturally has the effect of lowering prices. However, considering the somewhat unsatisfactory demand existing, with few exceptions prices are exceedingly firm, and it would occasion no surprise to see an advance similar to that which occurred this time last year. The future of the freight market tends to go up but assuming present rates are maintained any alteration in the price of timber is more likely to be upward than downward. Shipbuilding inquiries are not so numerous now although a few small orders have transpired during the past few days.

Sales from the recent arrivals have been more in evidence and storing is not being resorted to in so great a measure as recently, sellers preferring to ease prices a little rather than store. This has been done in a great many cases because once goods are stored it is found that with store rent and other handling charges added it is difficult to bring out cost. The bulk of the arrivals from Baltimore and Newport News has comprised railway oak against contracts, very few consignment parcels being in evidence. Several parcels of Gaboon mahogany and pitch pine have come in recently and have sold well.

A part cargo of Siberian pine arrived recently and is reported to be sold. The qualities of the various grades are very good, particularly so in the case of the "crown" or best grade. This wood is taking the place of Quebec yellow pine and seems to be finding favor.

The pitch pine market is looking firmer than for some time past in sympathy with advancing f. o. b. prices and the higher freights quoted from the Gulf ports.

During the past month deckloads of Riga spruce have arrived and deliveries from the quays are proceeding briskly. Prices rule firm and no drop is anticipated so long as the supply is kept in moderate compass. Canadian spruce, as far as cargoes are concerned, seems to be now almost a thing of the past and hence Rigas are being used to a larger extent than formerly.

LIVERPOOL

The hardwood market here seems in a very peculiar state. Most of the trade consumers seem to have a fixed opinion in their minds that the trade boom here is at an end, and some confirmations of this come in the August Board of Trade returns. How much of this is temporarily caused by the Balkan war is one of the problems most difficult to solve. All that is known is that for the moment no one seems inclined to buy, which, of course, is the immediate matter of importance as far as the lumber market is concerned. This position, in face of the advancing freight market, makes the hardwood market most difficult to calculate. Some of the lumbermen are inclined to be pessimistic and they cannot see how shipments are going to be profitable with the advancing freights and a probability of diminishing value. Their strong advice to shippers is on no account to send in consignments without advance orders, as in the present lack of confidence existing among the traders, they cannot hope for favorable reception.

The mahogany position shares the general outlook. As long as the trade boom in this country lasted and the supply kept on, the low price kept on the high side. Now things might easily change if trade does permanently fall away. Advice to buyers on the other side is to play the waiting game. It is thought the price will not go any higher and the market might very easily suffer a substantial slump.

Ash and hickory are perhaps a little better in value, but both markets want rest, and immediate shipments are not advised. Ash lumber has been selling well, and there are some signs that values will now go down again.

Gum lumber is very weak and shipments have been far too heavy. Round oak is also a weak spot, and prices of wagon oak planks are not all good; in fact, it is thought that the wagon oak market is in a very bad state, but no improvement can be predicted for some months to come. Birch and maple have been selling well, but shipments are not recommended without orders. Quartered oak orders can be readily secured at full values for the regular sizes of prime grades.

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EMPLOYES WANTED

WANTED SALESMAN

calling on Hardwood, Veneer and Woodworking plants to carry profitable side line on commission. State lines you carry. Address "BOX 91," care HARDWOOD RECORD.

WANTED.

Competent Hardwood Lumber Inspectors. Those experienced in Mahogany preferred. State experience. OTIS MFG. CO., New Orleans, La.

WANTED

Competent superintendent to take charge of hardwood band mill in a large Ohio city. To a man possessing qualifications and integrity, a third interest can be had. Unusual opportunity for right man. Fullest investigation extended. Address "SAWMILL," care HARDWOOD RECORD.

SALESMAN WANTED

by large manufacturing concern for northern hardwood and hemlock, to call on trade in lower Michigan, Indiana, Ohio and eastern states. Address "BOX 96," care HARDWOOD RECORD.

EMPLOYMENT WANTED

WANTED—EMPLOYMENT

When you want a salesman for New York state territory, write us. We can supply you with a good man. EMPIRE STATE ASSOCIATION of Wholesale Lumber & Sash & Door Salesmen. Chas. Johnson, Sec'y, 96 Kirkland Rd., Rochester, N. Y.

BUSINESS MANAGER

wants larger opportunities. Fifteen years' experience in factory, office and selling. Up on modern factory methods, cost and accounting systems, and gets results from employes. Now manager for woodworking plant; does buying of all material; has traveled from coast to coast and sold our products to largest buyers. Competent to hold an important position and help make things go. Working interest preferred. Age 35. References from past and present employers. Address "BOX 92," care HARDWOOD RECORD.

LOGS WANTED

WANTED—BLACK WALNUT LOGS

500 cars good black walnut logs, 10" and up in diameter, 6 ft. and up long. Will inspect at shipping point and pay cash.
GEO. W. HARTZELL, Dayton, Ohio.

WANTED—HARDWOOD LOGS

200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
C. L. WILLEY, 2558 S. Robey St., Chicago.

WAGON STOCK WANTED

I AM IN THE MARKET FOR

75 to 100 cars of oak poles, bolsters, sand boards, eveners, and reaches; and hickory and maple axles. Will inspect at shipping point, and pay cash. E. B. BROWN, 372 Bayne St., Buffalo, N. Y.

TIMBER FOR SALE

GUM LOGS FOR SALE

Will deliver at Jacksonville for export, if desired. Timber situated on Florida East Coast R. R., 150 miles south of Jacksonville.
C. B. JOHNS, L. B. No. 74, Ebensburg, Pa.

TIMBER ESTIMATING

TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.
THOS. J. McDONALD,
East Tenn. Natl. Bank Bldg.,
Knoxville, Tenn.

LUMBER FOR SALE

BUYERS OF HARDWOODS.

Do you want to get in touch with the best buyers of hardwood lumber? We have a list, showing the annual requirements in lumber, dimension stock and veneers and panels of consumers of those materials throughout the United States and Canada. The service is free to advertisers in the RECORD. It will interest you. Write us for further information about our "Selling Lumber by Mail System."
HARDWOOD RECORD, Ellsworth Bldg., Chicago.

PLAIN OAK FOR SALE

Broker wishes to get in touch with manufacturing consumer of 4/4 plain oak suitable for cutting into piece stock, 2 to 8 foot lengths, 3 to 9" widths. Can furnish 25 to 50 cars to the right parties. Address
"BOX 97," care HARDWOOD RECORD.

DIMENSION STOCK WANTED

WANTED

DIMENSION OAK

Plain and Quartered

Various sizes for chair and table factories

Send to us for specifications and prices.

INDIANA QUARTERED OAK CO.

7 East 42nd Street,

New York.

WANTED

Hard Maple and Beech Squares 42", 44", 48" long, plump 1" x 1". Must be clear and straight. If you have any to offer write us. Will take them dry or green.
THE COLUMBIA MFG. CO.,
New Philadelphia, Ohio.

WANTED

Large quantities 1¾x1¾x19 clear oak squares.
THE NORTHERN CHAIR CO.,
Port Washington, Wis.

WANTED

Large quantities 1¼x4x30.
THE WISCONSIN CHAIR CO.,
Port Washington, Wis.

LUMBER WANTED

WANTED

100,000 feet 4/4 sound wormy Chestnut.
S. BURKHOLDER LBR. CO., Crawfordsville, Ind.

WANTED ROCK ELM

5 carloads 10/4x6 and wider 10'—16'.
3 carloads 3x6 and wider, 10'—16'.
We can ship fresh from the saw. Inspect at point of shipment. Terms cash less 2%.
THE BRADLEY CO., Hamilton, Ont.

TIMBER LANDS FOR SALE

ARE YOU INTERESTED IN GUM and Red Oak?

I own in fee simple two small and carefully selected tracts of high-class gum and red oak stumpage. Will sell at price to make the buyer good money either as an investment or as an operating proposition.
Will deal with principals only. Address in confidence, "BOX 22," care HARDWOOD RECORD.

DIMENSION STOCK FOR SALE

DIMENSION RED OAK FOR SALE

1 car switch ties 7x9x12'.
3 cars 4/4 plain lumber.
3 cars small dimension 2x2x18" and up.
2 cars cull wagon poles 2x4x4x12'.
1 car cull 2x4 reaches.
W. I. NORRIS, Fairview, Ark.

FOR SALE

50,000 feet clear hard maple and beech squares, 6/4x6/4—18" to 48" lengths.
THE WOLF-LOCKWOOD LUMBER CO.,
Grand Rapids, Mich.

BUSINESS OPPORTUNITIES

WANTED—HARDWOOD LUMBERMEN—

to try the Gibson Tally Book. The three-throw aluminum tally ticket cover accommodates any form of ticket desired. The use of the special triplicate tally ticket supplied, printed on waterproof paper with carbon backs makes tallies unalterable. For durability, convenience, accuracy and for systematizing the inspection of lumber the Gibson tally method can't be beat.
Special forms of tally tickets mailed on application. Covers sold on approval to responsible concerns. HARDWOOD RECORD,
537 So. Dearborn St., Chicago.

WANTED OUTPUT

of the Hardwood Mills operating in West Virginia, also Tennessee and Arkansas; also Cypress and Gum. Address "BOX 90," care HARDWOOD RECORD.

EXCELLENT OPPORTUNITY

for man to go in manufacturing business. Have well-equipped hardwood factory suitable for making spokes and vehicle stock. Healthy location in town six thousand, on two rivers and two railroads. Address

"BOX 72," care HARDWOOD RECORD.

MACHINERY FOR SALE

AT MOUND CITY, ILL.

One complete circular mill with edger, trimmer, live rolls, portable boilers and engine.

THE WISCONSIN SEATING CO.,
New London, Wis.

FOR SALE

1 No. 46 Berlin Twin Matcher and double Surfacer, 30"x6".
1 No. 114 Berlin Inside Moulder and Matcher, 15"x6".
1 H. B. Smith 8" Moulder or door sticker.

Will be sold cheap for cash, for immediate shipment.

For further particulars inquire of
YELLOW POPLAR LUMBER CO., Coal Grove, O.

FOR SALE

Woodworking Machine Tools. Apply
HARLAN & HOLLINGSWORTH CORPORATION, Wilmington, Del.

MISCELLANEOUS

THE HARDWOOD RECORD is a different kind, and altogether better lumber newspaper than has hitherto been published. This is made possible by the loyal co-operation and support of the hardwood element of the lumber industry. If you are a subscriber you will agree.

OAK, POPLAR, ASH

and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you

Excellently Located Woodworking Factory

A woodworking factory consisting of a two-story modern brick building, 40x100 feet; a brick boiler and engine house, 30x30 feet, and three frame buildings, dimensions, 40x70 feet, 20x80 feet, 20x56 feet, with brick dry kiln 18x35 feet and a frame office building 35x36 feet, located in an enterprising northeastern Tennessee county seat town, is offered for sale at an attractive price.

A 100 H. P. Dillon boiler and a 14x30 Corliss engine furnish the power.

The machinery consists of lathes, reamers, knives, saws, sanders, etc., with all necessary pulleys, belting and shafting equipment. The buildings are steam heated and lighted by electricity.

This factory is adaptable to nearly any kind of wood-working industry and is well located on a railroad siding. This is a very favorable opportunity for one wishing a factory equipped and ready for immediate operations.

Full particulars will be given by referring to file No. 45485 and writing

M. V. RICHARDS
Land and Industrial Agent

SOUTHERN RAILWAY
Room 305, Washington, D. C.

GIBSON TALLY BOOK



This three-throw tally ticket cover is made from aluminum, and accommodates four tally tickets—4¼x8¾ inches in size.

Folds compactly to less than one-fourth inch in thickness and fits side or inside coat pocket.

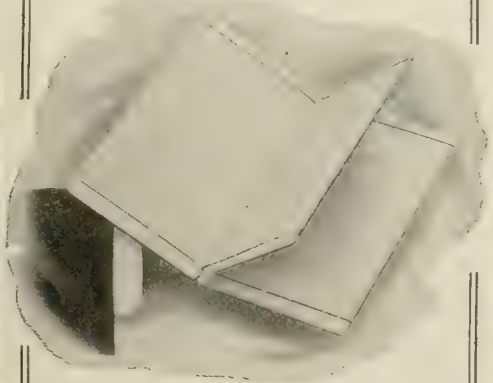
Gives large area of four tickets for complicated tallies, or straight grade can be made on one page.

Accommodates any form of tally ticket desired.

Special, patented, triplicate tally tickets supplied, printed on waterproof paper with carbon backs. Tallies made on these tickets are unalterable. Their use enables the inspector to retain triplicate, and forward original and duplicate. Duplicate designed to be attached to invoice.

These tally books are perfection for durability, covenience, accuracy, and for systematizing the inspection and measurement of lumber

Patent applied for on covers. Copyrighted, 1910. Triplicate Tally Tickets patented.



PRICE LIST

Aluminum Tally Covers, each - -	$ 1.00
Aluminum Tally Covers, per dozen - -	10.00
Patented triplicate Tally Tickets (stock form) per 1,000	10.00
Single sheet manila (stock form) Tally Tickets, per 1,000	4.00

Specimen forms of Tally Tickets mailed on application. Covers sold on approval to responsible concerns.

Manufactured by

Hardwood Record
537 S. Dearborn St., CHICAGO

CHICAGO

Osgood & Richardson
935 Peoples Gas Bldg.

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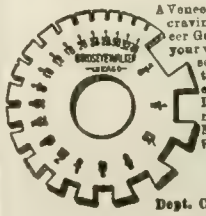
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Cottonwood, Gum, Oak, Ash, Cypress, Yellow Pine, Dimension Stock

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Factory Lumber
GRAY'S HARBOR SPRUCE
SOFT YELLOW FIR
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is in use, then imitation isn't possible. Sample if you ask for it.

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Chicago

We also make Time Checks, Stencils and Log Hammers.



MAKE BOX SHOOKS
Up to 24" Long, or
LOOSE BARREL STAVES
Of Finest Quality and at Lowest Cost
From Cordwood, Slabs, or Other Forest Waste by the Use of Gerlach Machinery.
The Peter Gerlach Co., Cleveland, O.

¶ The Gibson Aluminum Tally Book Cover and Tally Tickets are now employed by more than 2,000 lumber manufacturers, dealers and consumers.

American Forest Trees

By Henry H. Gibson **Edited by Hu Maxwell**

"AMERICAN FOREST TREES" is a comprehensive work of more than seven hundred pages, illustrated by more than one hundred full page pictures of forest types of tree growth, and hundreds of minor pictures.

It answers every question worth asking about the infinite variety of forest growth in this country, and the utilization of these woods in lumber and other forms. The opinion of an expert on this work is:

"AMERICAN FOREST TREES" is the foremost contribution that has ever been made to American forest and lumber literature.

The price of this work is Six Dollars ($6.00) net. It will be sent on receipt of price, prepaid, subject to return and refund of payment if it does not prove satisfactory.

The very complete character of this work may be judged by the index following:

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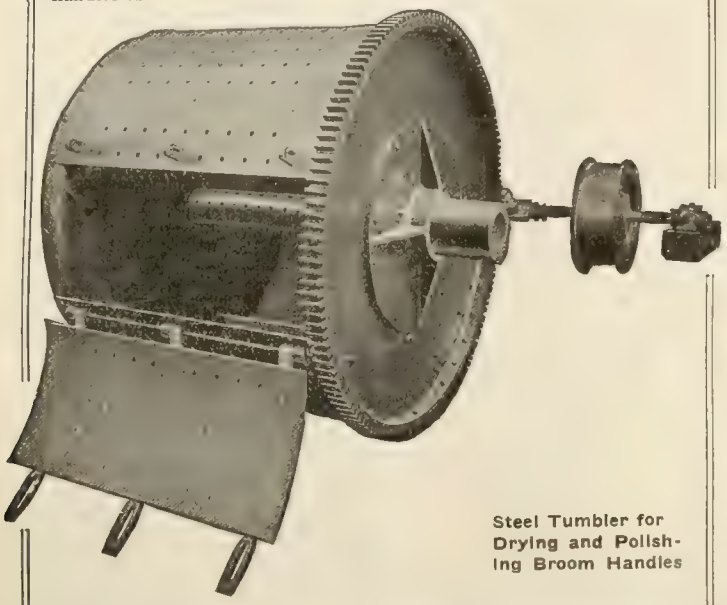
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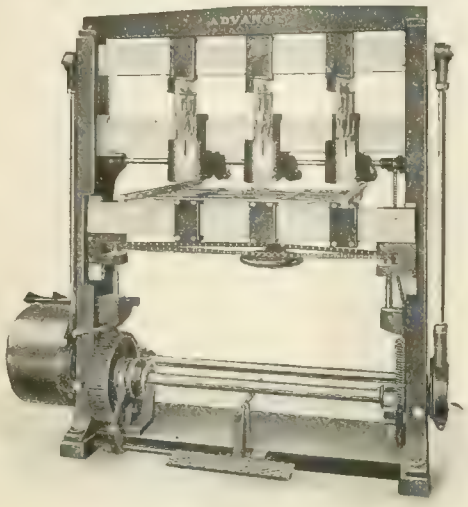
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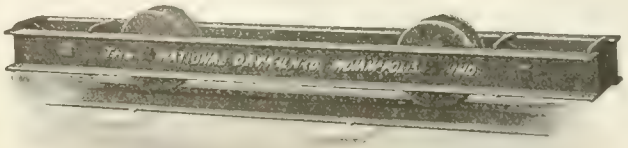
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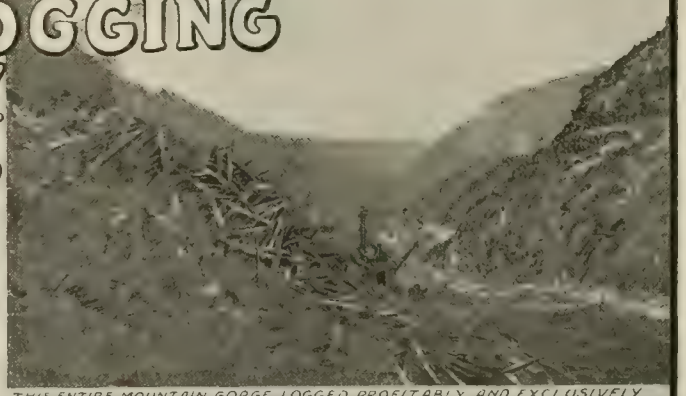
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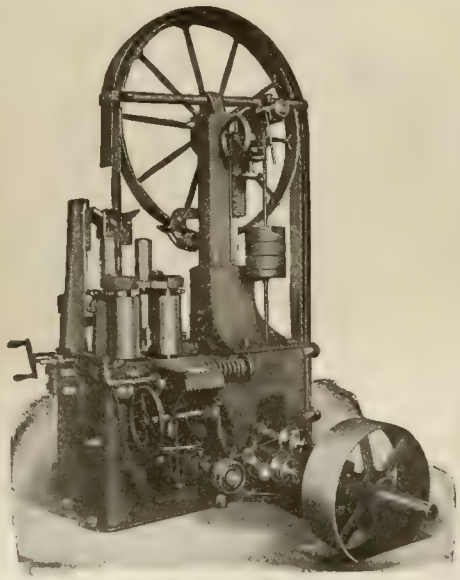
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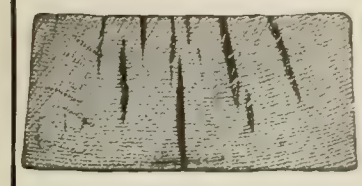
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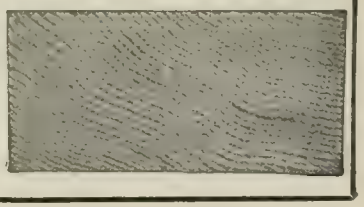


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From our Algoma factory, where we have specialized for twenty years, we produce panels of all sizes, flat or bent to shape, in all woods, notably in Mahogany and Quarter-Sawed Oak.

We make no two-ply stock, and do not employ sliced cut quartered oak. Our quartered oak panels are all from sawed veneer.

Every pound of glue we use is guaranteed hide stock. We do not use retainers. Our gluing forms are put under powerful screws and left until the glue has thoroughly set.

If you seek a guaranteed product that is the best, based on results accomplished by most painstaking attention and study of every detail, combined with the use of the best stock and an up-to-date equipment, our product will appeal to you.

If you are a "price buyer" we probably cannot interest you.

Custom Mill Work, Storage, Inspection

ON

Foreign Fancy Woods, Mahogany, Cedar, Circassian

We receive the logs, store or warehouse them, manufacture them into lumber, cut or saw veneers, pile and store the product, and ship via any railroad. Also furnish inspection returns on logs or lumber. Can furnish accommodations and economies which it is impossible to secure elsewhere. We always have on our yards parcels of plain and figured African, Mexican and Cuban Mahogany, Circassian Walnut and Cedar logs, placed here for sale by direct foreign shippers, from which advantageous purchases can be made.

Astoria Veneer Mills & Dock Co. Long Island City, New York

"SOVEMANCO."

We can furnish anything you want in

Sawed and Sliced Foreign and Domestic Figured Veneers

Capacity 15 million feet per year. Ready to take care of carload orders promptly. Small orders shipped same day received, if desired.

SOUTHERN VENEER MFG. CO., Inc.

Office, 21st and Standard. LOUISVILLE, KY. Mills, Magnolia, Standard and 21st Sts.

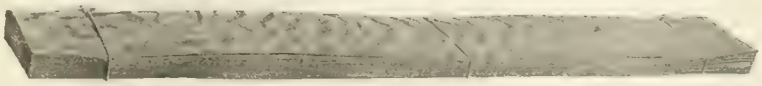
Veneers and Panels with a Reputation

WE manufacture Veneers in all the native woods and for all purposes. Also Built-up Panels in native and foreign woods—three and five-ply—and have established a reputation for furnishing high-grade material. Send us your inquiries and orders and become one of our satisfied customers.

Underwood Veneer Co. *Wausau, Wis.*

VENEERS AND PANELS

OUR SPECIALTY
Highly Figured Quarter-Sawed White Oak Veneer



PUTNAM VENEER & LUMBER CO.
ROACHDALE, IND.
H. I. CUTSINGER, Gen'l Mgr.

Hoffman Brothers Company
Sliced and Sawed, Quartered and Plain Red and White Oak
Walnut Cherry Ash Maple
Let us Send You Our Stock List FORT WAYNE, IND.

CIRCASSIAN MAHOGANY
Logs VENEERS Lumber
WE IMPORT WE MANUFACTURE
All Thicknesses of Mahogany
Ready for Shipment
RICE VENEER & LUMBER CO.
GRAND RAPIDS, MICH.

B. C. JARRELL & CO.
MANUFACTURERS OF
High Grade, Rotary-Cut Gum
VENEERS
Cut right; dried right; prices right
HUMBOLDT, - TENNESSEE

READY TO LAY
Dimension Stock cut to your sizes in 1/20 Sliced Quartered Oak and Mahogany
MATCHED, JOINTED AND TAPED
We also manufacture a full line of high-grade, rotary-cut veneers, making a specialty of exceptionally fine poplar.
ADAMS & RAYMOND VENEER COMPANY
Established 1869 Indianapolis, Ind.

If You Knew
What our BULLETIN SERVICE was doing for your competitor in the lumber business, you'd not only want the service yourself, but YOU'D HAVE IT.
Let Us Tell You About It.
Hardwood Record :: Chicago

The Central Veneer Co.
SOFT YELLOW POPLAR
CROSS BANDING
Huntington, West Virginia

THE SOUTH

PROMINENT SOUTHERN MANUFACTURERS

GARETSON-GREASON LUMBER CO.
1002-1005 Times Bldg. ST. LOUIS
MANUFACTURERS
Three Mills

Frank Purcell Kansas City U. S. A.
Exporter of Black Walnut Logs
JO MARK
FIGURED WALNUT IN LONG WOOD AND STUMPS

Salt Lick Lumber Co.
SALT LICK - - - - KENTUCKY
MANUFACTURERS OF
Eureka OAK AND BEECH **Oak Flooring**
Complete stock of 3/8" and 13/16" in all standard widths

Carolina Spruce Co.
MANUFACTURERS
Spruce & Hardwood
LUMBER
Mills: Pensacola N. C. *Capacity* 90,000 ft. per day
Charles K. Parry & Co. Sole Selling Agts. Land Title Bldg. Philadelphia

Louisiana Long Leaf Lumber Co.
Fisher, Louisiana
Diamond 4 L Co. Brand
OAK FLOORING
A GUARANTEE OF PERFECTION

Our Corps of Inspectors
Intelligent! Highly Trained!
Conscientious!
Is assurance that you will get what your order calls for when you buy Gum from us.
Himmelberger-Harrison Lumber Company
Cape Girardeau, Missouri

Baker-Matthews Manufacturing Co.
Sikeston, Mo.
Band Sawn Southern Hardwoods
SPECIALTIES
RED GUM, PLAIN OAK
SEND US YOUR INQUIRIES

Hardwood Record's
strongest circulation is in the region where things are made of wood—WISCONSIN, MICHIGAN, ILLINOIS, INDIANA, OHIO, PENNSYLVANIA, NEW YORK and the East. **It's the BEST sales medium for hardwood lumber.**

BUFFALO

The Foremost Hardwood Market of the East

G. ELIAS & BRO.
HARDWOODS
White Pine, Yellow Pine, Spruce, Hemlock, Fir, Lumber, Timber, Millwork, Boxes, Maple and Oak Flooring
955-1015 ELK STREET

BUFFALO HARDWOOD LUMBER CO.
We want to buy for cash
OAK, ASH AND OTHER HARDWOODS
All grades and thicknesses.
Will receive and inspect stock at shipping point
Branch yard, Memphis, Tenn.
940 Seneca Street, BUFFALO

Hugh McLean Lumber Co.
OUR SPECIALTY.
QUARTERED WHITE OAK
940 ELK STREET

T. SULLIVAN & CO.
SPECIALTIES:
Gray Elm, Brown Ash
Pacific Coast Fir and Spruce
2 ARTHUR STREET

ORSON E. YEAGER
SPECIALTIES:
Oak, Ash and Poplar
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ANTHONY MILLER
HARDWOODS OF ALL KINDS
893 EAGLE STREET

I. N. Stewart & Bro.
Specialties
Cherry and Oak
892 Elk Street

Standard Hardwood Lumber Co.
OAK, ASH and CHESTNUT
1075 Clinton Street

The above firms carry large and well assorted stocks of all kinds and grades of Hardwoods, and have every facility for filling and shipping orders promptly. They will be pleased to have your inquiries.

Vansant, Kitchen & Company

Manufacturers Old-Fashioned Soft Yellow Poplar

5-8 and 4-4 in Wide Stock, Specialty

Ashland, Kentucky

EASTERN REPRESENTATIVE, John L. Cochran
601 W. 115th Street, New York City

FOR DISCRIMINATING BUYERS wanting a Clear Board for first class shelving and other similar purposes there is nothing that will surpass our CLEAR HEMLOCK. It is bright in appearance, light in weight and is odorless and durable. We make it in 6″, 8″, 10″ and 12″ widths, as also 13″ to 20″ wide. In addition to this, we have all other grades in Hemlock Boards. Also you should try the soft quality of our Smoky Mountain Chestnut. In No. 1 Common and Better grades we can supply it 60′ 14′ and 16′ lengths. The widths are most desirable and the manufacture perfect. Also we have a nice assortment of 5/8″ Panel Poplar 28″ to 36″ and 36″ to 44″ wide or can be assorted in widths as may be desired. This is the genuine soft yellow Smoky Mountain Poplar. Also do not forget we are in position at all times to cut to order high grade Poplar, Ash and Maple.

WE SOLICIT THE BUSINESS OF DISCRIMINATING BUYERS FOR ALL HIGH GRADE SMOKY MOUNTAIN HARDWOODS AND HEMLOCK

LITTLE RIVER LUMBER COMPANY **Townsend, Tenn.**

W. H. White Company
Boyne City Lumber Company

Mills and General Office: BOYNE CITY, MICH.
Sales Office: BUFFALO, N. Y.

STOCK DRY — STANDARD GRADES — BEST MANUFACTURE — CAR OR CARGO SHIPMENTS

WE OFFER
All Kinds
OF
Hardwood and Hemlock
Lumber
Hardwood
Flooring, Lath
AND
Dimension Stock

YELLOW POPLAR

MANUFACTURERS OF BAND SAWED
POPLAR
QUARTERED OAK
PLAIN OAK
CHESTNUT
BASSWOOD

White Oak Flooring

SPECIALTY
QUARTER SAWED
WHITE OAK

Coal Grove, Ohio, U. S. A.

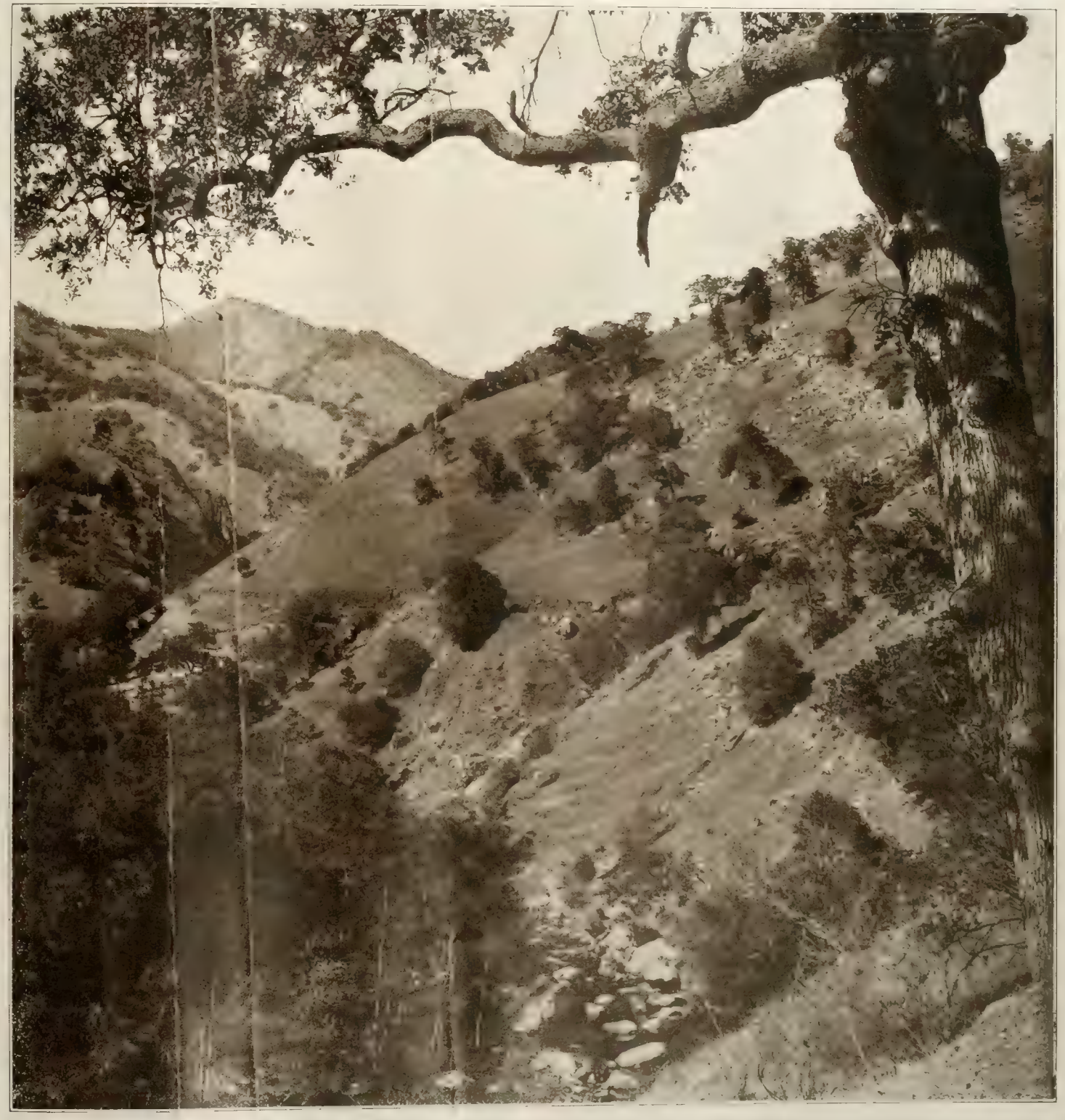
LUMBER CO.

Hardwood Record

Eighteenth Year, Semi-Monthly.

CHICAGO, OCTOBER 10, 1913

Subscription $2. Single Copies, 10 Cents.



ADVERTISERS' CLASSIFIED DIRECTORY FOLLOWS READING MATTER.

Gentlemen:

We sell Lumber, especially Hardwoods.

We manufacture almost all we sell—we are first hands.

Our delivery points are scattered and prompt shipments our aim. Get in touch. We'll do you good.

J. Gibson McIlvain & Co.
1420 Chestnut Street, Philadelphia

For Quick Shipment

5 cars 4/4" 1s & 2s Q. W. O.
3 cars 4/4" No. 1 Com. Q. W. O.
3 cars 4/4" Clear Q. W. O. Strips, 4 to 5½".
1 car 4/4" Clear Q. W. O. Strips, 2½ to 3½".
½ car 4/4" Clear Q. W. O. Strips, 1½ to 2".
4 cars 4/4" 1s & 2s Plain W. O.
3 cars 4/4" No. 1 Com. Plain W. O.
4 cars 4/4" Com. & Bet. Q. R. O.
2 cars 4/4" 1s & 2s Plain R. O.
7 cars 4/4" No. 1 Com. Plain R. O.
2 cars 4/4" No. 2 Com. Plain R. O.
2 cars 5/4" 1s & 2s Plain R. O.
1 car 5/4" No. 1 Com. Plain R. O.
4 cars 3/4" 1s & 2s Plain R. O.
5 cars 4/4" 1s & 2s Plain Red Gum.
7 cars 4/4" No. 1 Com. Plain Red Gum.
3 cars 4/4" 1s & 2s Qtd. Red Gum.
1 car 4/4" No. 1 Com. Qtd. Red Gum.
2 cars 5/4" 1s & 2s Qtd. Red Gum.
1 car 5/8" 1s & 2s Plain Red Gum.
4 cars 4/4" 1s & 2s Sap Gum.
3 cars 3/4" 1s & 2s Sap Gum.
3 cars 4/4" 1s & 2s Cottonwood, 6" to 18".
1 car 4/4" 1s & 2s Cottonwood, 13" and up.
8 cars 4/4" Cottonwood Box Boards, 13 to 17".
2 cars 4/4" Cottonwood Box Boards, 9 to 12".
2 cars 4/4" Cottonwood Box Boards, 9 to 10".
7 cars 4/4" No. 1 Com. Cottonwood.

Immediate Attention to All Inquiries

Memphis Band Mill Company
Memphis, Tenn.

Cartier-Holland Lumber Company

"A Real Opportunity"

Just look over the following items of Specially Manufactured Furniture Stock. Band Sawed, Perfectly Edged and Trimmed:

80,000′ 4/4 End Cured Winter Sawn White Maple
5,000′ 5/4 End Cured Winter Sawn White Maple
5,000′ 6/4 End Cured Winter Sawn White Maple
10,000′ 8/4 End Cured Winter Sawn White Maple
40,000′ 5/4 Selected No. 1 & Better Birch
250,000′ 1x4 & Wider Pine Crating (85% 6" & over)

A Postal Card Will Bring Prices That Will Warrant Your Orders

Ludington Michigan

MICHIGAN

FAMOUS FOR HARD MAPLE AND GREY ELM

BASSWOOD

We Offer for Prompt Shipment

1 x 4 Clear Strips	150 M
1 x 6 1's and 2's	200 M
1 x 7 and 8″ 1's and 2's	34 M
1 x 3 No. 1 Common	25 M
1 x 4 No. 1 Common	50 M
1 x 5 No. 1 Common	32 M
1 x6 No. 1 Common	148 M
1 x7 and up No. 1 Common	26 M
4/4 No. 1 Common	65 M

Oct. 7, 1913

COBBS & MITCHELL, Inc.

Sales Department

CADILLAC MICH.

Mitchell Brothers Co.

Dry Stock List

MICHIGAN HARDWOODS

Cadillac, Mich. Oct. 7, 1913

1x7 & 8 Basswood, 1s & 2s	30 M
1x4 Basswood, Clear	13 M
1x4 Basswood, No. 1 Common	11 M
1x6 Basswood, No. 1 Common (part dry)	19 M
4/4 Birch, 1s & 2s (part dry)	17 M
4/4 Birch, No. 3 Common (part dry)	33 M
4/4 Cadillac Gray Elm 1s & 2s	96 M
4/4 Cadillac Gray Elm, No. 1 Common	100 M
4/4 Cadillac Gray Elm, No. 2 Common	81 M
4/4 Cadillac Gray Elm, No. 3 Common	28 M
4/4 Rock Elm, No. 2 Common & Better	7 M
4/4 Soft Maple No. 2 Com. & Bet. (part dry)	18 M
4/4 Soft Maple, No. 3 Com	4 M
4/4 White Maple, end dried (clear)	14 M
4/4 Birdseye Maple 1s & 2s, end dried	1½ M

CADILLAC QUALITY

When you want lumber of Cadillac Quality, Lumber which has been manufactured and seasoned properly, and grades which have not been blended to meet price competition—send us your inquiries.

WE SELL ONLY MITCHELL'S MAKE

W. D. YOUNG & CO.

MANUFACTURERS

FINEST MAPLE FLOORING

KILN DRIED, HOLLOW BACKED
MATCHED OR JOINTED
POLISHED AND BUNDLED

Hard Maple, Beech and Birch Lumber

1 TO 6 INCHES THICK WRITE FOR PRICES

BAY CITY, :: :: MICHIGAN

THE

Kneeland-Bigelow Company

Hardwood Manufacturers

30,000 ft. 6/4 No. 1 C. & B. Basswood
50,000 ft. 5/4 1st & 2nds Basswood.
75,000 ft. 5/4 No. 2 C. & B. Birch
20,000 ft. 6/4 No. 2 C. & B. Birch
100,000 ft. 6/4 No. 2 C. & B. Beech
40,000 ft. 8/4 No. 2 C. & B. Beech

All of the above stock is nicely manufactured, being band sawed, trimmed, and well seasoned. We are prepared to quote attractive prices for this material for immediate shipment.

BAY CITY, MICH.





OUR DOUBLE BAND MILL, HUTTIG, ARK.

Why We Can Give "Value Received"

We own one hundred thousand acres of the best virgin Southern Hardwood timber.

We operate large band mills at Huttig, Ark., and Deering, Mo.

We cut FORTY MILLION feet of hardwoods annually and carry 15,000,000 feet **IN STOCK.**

We sell only stock cut on our own mills and so can **GUARANTEE** the quality of **EVERY** shipment.

We ship high grades that increase the size and percentage of your cuttings, reduce factory costs and shrink the waste pile. Therefore:

We can SAVE YOU MONEY on every shipment of oak, ash, gum, elm, cypress, tupelo, hickory, cottonwood, sycamore, soft maple and dimension.

LET US PROVE THIS ON YOUR NEXT ORDER

Wisconsin Lumber Company
Harvester Bldg. **CHICAGO**

Ready for Shipment

Ten cars
4/4 No. 1 Common & Better Birch

Five cars
6/4 No. 1 Common & Better Birch

Two cars
8/4 No. 1 Common & Better Birch

Two cars
4/4 No. 2 Common & Better Ash

Three cars
4/4 No. 1 Common & Better Soft Elm

Five cars
4/4 No. 2 Com. & Better Basswood

Above cut from virgin timber. Grade and manufacture are first class.

Mears - Slayton Lumber Co.
1237 Belmont Ave. **Chicago, Ill.**

FLANNER-STEGER LAND & LUMBER CO.

WANTED—TO MOVE QUICK

- 2 CARS 5/4 x 12" & WIDER 1st & 2nd BASSWOOD
- 4 CARS 3" ROCK ELM BRIDGE PLANK
- 800,000 FEET NO. 3 HEMLOCK
- 100,000 FEET 4/4 BOX COMMON BIRCH

SEND US YOUR INQUIRIES

MILLS:
BLACKWELL, WISCONSIN

GENERAL SALES OFFICE
1704 STEGER BLDG., CHICAGO, ILL.

CHICAGO

THE GREATEST HARDWOOD MARKET IN THE WORLD

Estabrook-Skeele Lumber Co.

MANUFACTURERS AND DEALERS IN

Maple, Birch, Elm, Basswood, Ash

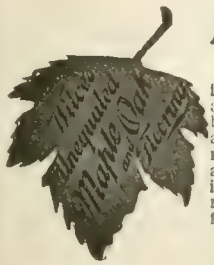
And Other Northern Hardwoods

In the Market for Round Lots of Hardwood

WRITE US BEFORE SELLING

Fisher Building, - - - CHICAGO

'PHONE HARRISON 1984



A floor to adore

For thirty-three years Wilce's Hardwood Flooring has been among the foremost on the market and because it stands today "unequaled" is the best evidence that its manufacturer has kept abreast of modern methods and the advanced demands of the trade. To convince yourself of the above statements, try our polished surface flooring, tongued and grooved, hollow backed, with matched ends and holes for blind nailing—you'll find it reduces the expense of laying and polishing.

Our Booklet tells all about Hardwood Flooring and how to care for it—also prices—and is free.

The T. Wilce Company

22nd and Throop Sts. CHICAGO, ILL.

We plead "GUILTY"—Our present facilities will not supply all the panels our increasing trade calls for, but we are not sacrificing quality in order to increase output.

We are making a specialty of door and wainscot PANELS, 3/8", 5/16", 1/4"; Plain and Quartered Oak, Birch, Yellow Pine, and Mahogany.

Also Stile and Rail veneers in these woods, cut to your widths; 1/8", 3/16", 1/4". And, 1/28", 1/24", 1/20", 1/16", wide veneer for panel faces in Oak, Circassian Walnut, Mahogany, and Birch.

Core veneer and crossbanding.

LUMBER—

Mexican, Honduras, East India, Prima Vera, and Cuban Mahogany. Tenn. Red Cedar. All thicknesses.

HUDDLESTON-MARSH LUMBER CO.

2254 Lumber Street, Chicago, Ill.

CIRCASSIAN

It costs money to match the usual run of Circassian walnut in paneling because of its inherent defects; hence

If you secure the right figure and widths in clear stock you are just that much ahead, aren't you? We are fortunate in just having secured this rare combination in an especially selected shipment of veneer.

In sincerity we can say that we never saw a closer, richer figure or more completely figured stock. Its clearness and width are astonishing.

ASK US TO GIVE YOU DETAILS

VENEER MANUFACTURERS COMPANY

CHICAGO ILLINOIS

CHOICE BIRCH AND MAPLE—10,500 ACRES

I offer the above tract of best quality and splendidly located timber in Ontario, ten miles from Sault Ste. Marie, Ontario, a town of 25,000 population. Will cut 90% birch and maple. Estimated by George F. Beardsley, cruiser of Grand Rapids, Mich. Location and mill site on deep water. Can ship either by water or rail. Lands in fee simple—no crown dues, no export restrictions. Close to American Soo. Easy logging. Reasonable price and terms.

William H. Ranson, Sault Ste Marie, Mich.

Hayden & Westcott Lumber Co.

SPECIAL RAILROAD DEPT.

Hardwoods :: Softwoods

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For items of Hardwood Stock or Hardwood Machinery, you will find it advantageous to write our advertisers. Get in touch!

KNOXVILLE

Famous for Finest Type of Poplar, Oak and Chestnut

VESTAL LUMBER AND MANUFACTURING CO.

KNOXVILLE, TENNESSEE.

QUARTERED WHITE OAK

OUR SPECIALTY

MANUFACTURERS OF

QUARTERED WHITE OAK, PLAIN OAK, POPLAR, WALNUT & TENNESSEE RED CEDAR LUMBER

BAND MILLS AT VESTAL, A SUBURB OF KNOXVILLE. SOUTHERN AND LOUISVILLE & NASHVILLE RAILROAD

H. S. MIZNER, Pres. — J. M. LOGAN, Gen'l Manager

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J. M. LOGAN LUMBER CO.

MANUFACTURERS AND WHOLESALERS

HARDWOODS AND PINE

POPLAR A SPECIALTY

Main Office and Yards: Knoxville

Branch Office and Yard:
Bank and McLean Ave., Cincinnati — I. M. ASHER, Mgr.

We Want Orders for the following Dry Stock:

WHITE OAK—Plain or Quartered.
RED OAK—Plain or Quartered.
CHESTNUT — BASSWOOD
POPLAR — WHITE PINE

Always carry large well assorted stock of all kinds of Hardwoods.

CAN SHIP ON SHORT NOTICE.

Maphet & Shea Lumber Co.

Manufacturers and Wholesalers

OFFICE: 703-705 HENSON BUILDING

Yard: Middlebrook Pike and Lonsdale Car Line

KNOXVILLE, TENN.

WE WANT TO MOVE

3 cars 4/4 No. 1 Common Poplar, 7" & up
2 cars 4/4 Clear Sap Poplar, 7" & up
1 car 4/4 Select Poplar, 7" & up
1 car 4/4 1 & 2 Red Oak, 10" & up
1 car 4/4 1 & 2 Chestnut
1 car 4/4 No. 1 Common Chestnut

We manufacture: YELLOW POPLAR, OAK, CHESTNUT, WHITE AND YELLOW PINE, HEMLOCK BARK, ETC.

BAND AND CIRCULAR MILLS—EAST TENN.
MOUNTAIN VIRGIN HARDWOOD STUMPAGE

"THE VERY BEST"

ASH, BUCKEYE,
RED BIRCH, CHESTNUT, GUM,
RED OAK, WHITE OAK, PINE,
POPLAR and WALNUT

Knoxville Veneer Co.

P. B. RAYMOND, General Manager, Knoxville, Tenn.

Kimball & Kopcke

Knoxville, Tennessee

Manufacturers and Shippers of

Appalachian Hardwoods

OAK OUR SPECIALTY

CINCINNATI
THE GATEWAY OF THE SOUTH

Are You Satisfied *With the Oak You Are Getting?*

IS IT SOFT IN TEXTURE?
IS IT EVEN COLORED?
IS IT WELL FIGURED?

If it isn't, you are not getting it from US.
Our stock is Band sawn and can't be beat.
Give us a chance to ship you a sample car.

The Mowbray & Robinson Co., Cincinnati Ohio

MANUFACTURERS OF
PLAIN AND QUARTER-SAWN OAK AND POPLAR

MILLS
Quicksand, Ky.
Viper, Ky.
West Irvine, Ky.

MAIN OFFICE
CINCINNATI, OHIO

YARDS
Cincinnati, O.
Detroit, Mich.
Rochester, N. Y.
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W. E. HEYSER, President WEAVER HASS, V. President
BENJAMIN BRAMLAGE, Sec'y & Treas.

The W. E. Heyser Lumber Company

MAIN OFFICE & YARDS
Winton Place
Cincinnati, Ohio

BRANCH YARDS AND MILLS
West Virginia, Mississippi, Arkansas & Kentucky

12,000,000 ft. High Grade West Virginia and Southern Hardwoods in stock at all times.

Shipments made direct from our own yards and mills in straight or mixed cars.

SEND US YOUR INQUIRIES

L. W. RADINA & CO.

DEALERS IN

POPLAR AND HARDWOODS

CINCINNATI : : OHIO

"WE ARE GETTING RESULTS"
WRITES ONE ADVERTISER
This Means That He Is Getting
NEW BUSINESS
Through His Ad
If we can do it for him is there any logical reason why we can't for you?
MAKE US PROVE IT
HARDWOOD RECORD, CHICAGO

Lest You Forget
and
You probably don't know that we are now
Manufacturing in White and Red Plain and Quarter-Sawed **OAK**
3/8, 1/2, 5/8, 3/4, 4/4, 5/4 — 100,000 Feet per Day
EXPORT AND DOMESTIC

BENNETT & WITTE
MEMPHIS, TENN.
NEW ORLEANS, LA. CINCINNATI, O.
CABLE ADDRESS, ALL OFFICES, "BENNETT"

SAVE YOUR MONEY BY USING THE
RED BOOK Published Semi-annually in February and August

It contains a carefully prepared list of the buyers of lumber in car lots, both among the dealers and manufacturers.

The book indicates their financial standing and manner of meeting obligations. Covers the **United States, Alberta, Manitoba and Saskatchewan.** The trade recognizes this book as the authority on the lines it covers.

A well organized Collection Department is also operated and the same is open to you. Write for terms.

Lumbermen's Credit Assn., ESTABLISHED 1878

608 So. Dearborn St. CHICAGO — Mention This Paper. — 116 Nassau Street NEW YORK CITY

Birch Is Our Specialty
All Grades, All Thicknesses

Basswood
Maple
Elm

Oelhafen Lbr. Co.
Tomahawk
Wis.

LAMB-FISH LUMBER COMPANY

Band Mill and General Offices

CHARLESTON, MISS.

THE LARGEST HARDWOOD MILL IN THE WORLD—ANNUAL CAPACITY 40,000,000

We Produce

Kraetzer-cured LUMBER

STOCK LIST—Dry Lumber on Hand October 1st, 1913

	3/8"	1/2"	5/8"	3/4"	4/4"	5/4"	6/4"	8/4"	10/4"	12/4"	16/4"
FAS Qtd. White Oak	20,000	56,000	58,000	45,000	*150,000	*8,000	4,000				
FAS Qtd. White Oak, 10" & up					22,400						
FAS Qtd. White Oak, 12" & up						*18,000					
FAS Qtd. White Oak Strips					30,000						
No. 1 Com. Qtd. White Oak	20,000		15,000	*15,000	35,000	*5,000					
No. 1 Com. Qtd. White Oak, 6" & up					30,000						
No. 2 Com. Qtd. White Oak	20,000				25,000						
No. 1 Com. Qtd. White Oak Strips					*20,000						
FAS Plain White Oak	43,000	4,000			50,000						2,000
No. 1 Com. Plain White Oak	11,000		8,000	28,000	50,000	17,000		26,000		1,000	
No. 2 Com. Plain White Oak	10,000	8,000									
FAS Plain Red Oak			15,000	15,000	150,000	40,000	*24,000	*20,000			500
No. 1 Com. Plain Red Oak			25,000	22,000	200,000	14,000		2,000			
No. 2 Com. Plain Red Oak					*75,000		2,000				
Oak Core Stock					200,000						
FAS Red Gum	300,000	300,000	125,000	275,000	250,000	120,000	160,000	17,000			
No. 1 Com. Red Gum	70,000	100,000	140,000	150,000	350,000	24,000	30,000	32,000			
Com. and Better Qtd. Red Gum					15,000	13,000	10,000				
FAS Highly Fig. Red Gum	20,000	22,000	15,000	20,000	12,000	4,000	3,000	3,000			
FAS Sap Gum, 13-17"					85,000						
FAS Sap Gum, 18" & up					24,000						
FAS Sap Gum, 6" & up	22,000	25,000	17,000	20,000	15,000	50,000	15,000	10,000			
Sap Gum Box Bds., 13-17", Stained					39,000						
Sap Gum Box Bds., 8-12"					15,000						
No. 1 Com. Sap Gum	25,000	20,000	18,000	28,000	74,000		17,000				
No. 2 Com. Gum	160,000	90,000	75,000	20,000	225,000	100,000	100,000				
No. 3 Com. Gum					200,000	40,000	50,000				
FAS Cypress					10,000		5,000				
Select Cypress					14,000		15,000				
Shop & Better Cypress							150,000				
Log Run Cypress					113,000			60,000			
Tupelo, Common & Better					125,000						
Cottonwood, Log Run					8,000						

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3 cars 5/8" x 6" & Up 1sts & 2nds Sap Gum.
4 cars 3/4" x 6" & Up 1sts & 2nds Sap Gum.
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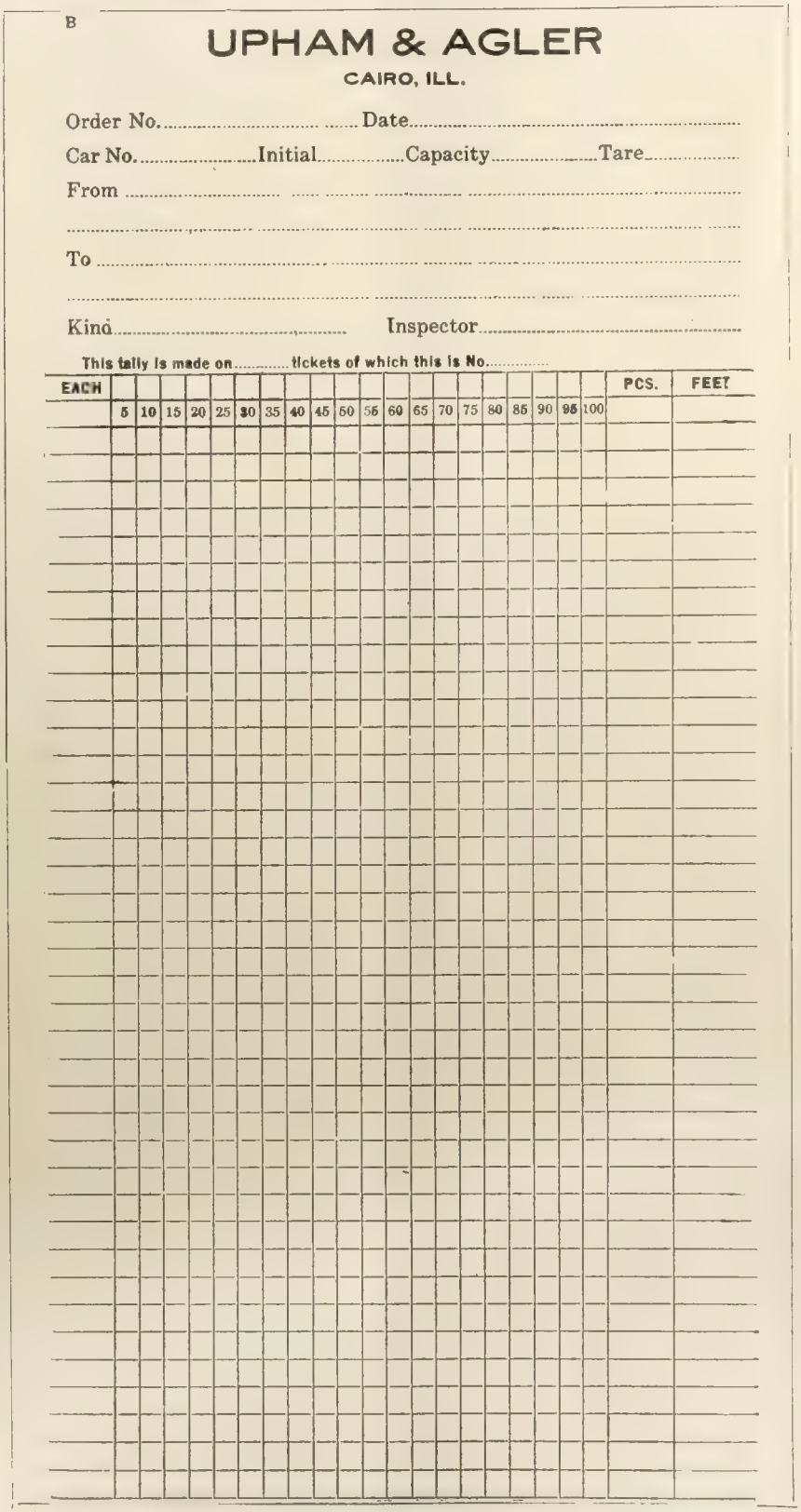
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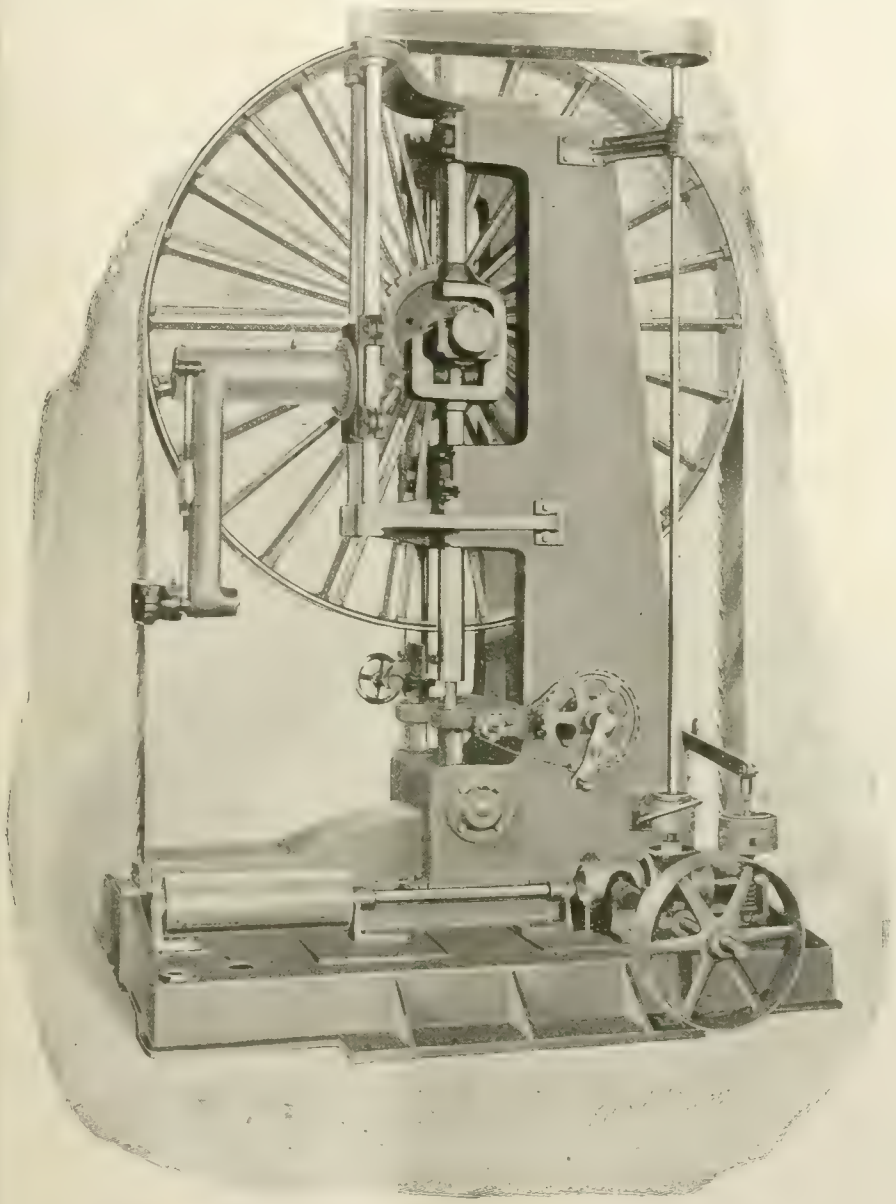
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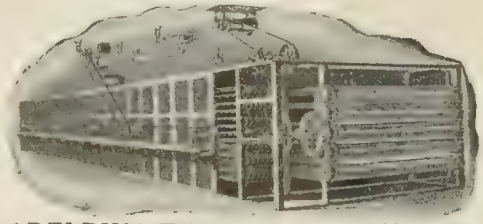
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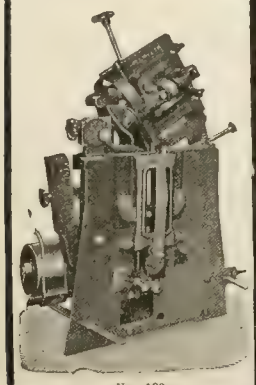
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Hu Maxwell }

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Review and Outlook

General Market Conditions

WITHOUT ANY INTENT TOWARDS PESSIMISM, a frank analysis of present conditions in the hardwood lumber business demonstrates clearly that that branch of the industry is not in good shape either as to sales or prices. Generally throughout the country a very fair volume of business is being transacted, but the policy continues to be everywhere evident on the part of buyers to place small orders whenever they are in need of stock, and not to buy unless absolutely necessary in even reasonable quantities. Of course this situation is not strictly true in every case, but it is safe to say that it is the general condition of the hardwood business today.

It would seem, on account of the fact that orders are numerous, that at least market value of stocks would be realized, and in fact they are in some cases, but the very fact that orders are smaller means that they are more difficult to get and require a more steady and greater outlay of money to secure them. The result of this is that holders of good quantities of hardwood stocks are more anxious to turn over their lumber than at such times as they are reasonably sure of securing orders a few of which will wipe out any surplus which might accumulate. When the trade is anxious to move lumber it will make price concessions and that is happening today.

A close analysis of the situation reveals more or less inconsistency as to the various factors contributing to present conditions. Actual building statistics, for instance, indicate that the building trade is in really good shape for the most part. Nevertheless interior manufacturers are not buying lumber, and they are not buying because their business is not doing so well as they would like to have it.

The furniture business seems to be in first-class condition, and the buyers at furniture factories are only buying what they actually need.

The good crop this year and the excellent values realized resulted in a healthy business for manufacturers of farm implements. These people are doing well, and while they are calling for quite a little of the various species of hardwoods going into implement manufacture, they are not buying so much as they should under proper conditions, and so it goes down the line, the ultimate conclusion being that there is a real apprehension, or it might be better to say, hesitation on the part of the business element of the country. This probably is affecting the lumber business directly more in the matter of actual money scarcity than for any other reason, and behind this condition can be seen the work of the financial powers.

It is probably safe to state that no very definite improvement of the situation will occur until the banking element of the country, which holds the key to the financial situation, knows definitely just what to expect from Washington regarding the many proposed changes in the currency system of the country. Some consolation can be seen in this, however, because of the fact that the president will make every effort to secure some legislation as quickly as he can possibly whip the forces into line. He demonstrated his power in connection with the tariff legislation and hence we can be fairly certain of energetic efforts on his part to secure speed in the passage of currency measures.

When the currency bill is finally passed, it may be viewed favorably by the banking interests of the country. The fact that they are taking such an interest in its discussion at Washington, both by correspondence and by personal interviews at the capitol, would rather indicate that the bill when it really becomes a law will be, as far as is possible, satisfactory to them. If this condition is realized there will be absolutely no reason for further holding back of business, but until then it is not at all probable that any marked improvement in the situation will be felt.

As to the hardwood business specifically, the mills are not realizing what they have realized and what they justly might expect for their stock. The different woods continue in the same relative position as to demand which they have occupied for some time past. Trade in the East continues to appear at least on the surface to be more healthy than in the Middle West, but the demand everywhere, while fairly steady, is not satisfactory. It continues to be a fact, however, that there is no great accumulation of stock at any of the mill centers in the lower Mississippi section, though a great deal of lumber is being manufactured.

Unusually good logging conditions which prevailed just before the recent heavy rains in the Arkansas, Mississippi and Tennessee sections, resulted in the piling up of an immense quantity of logs, in fact, in some cases twice as many as the sawmill operators had expected. The result was that in order to convert these logs into lumber before worms got at them, some of the mills have been running night and day for some little time. This will mean that the yards in the Memphis territory will for a time at least have an excellent assortment of stock. However, the wet conditions which followed the dry spell have checked logging and in some sections have actually stopped it, so that the former condition may be offset to a degree by the later developments.

Reports from northern mill districts covering hardwoods do not appear to be as healthy as they have been, but unquestionably conditions in that part of the country are in fairly good shape as far as stocks, and generally speaking, as far as prices are concerned.

Thin Forest Growth

THE COVER PICTURE illustrating this issue of HARDWOOD RECORD may not have a familiar look to readers whose whole experience has been with eastern scenery. They will not regard it as a

very promising timber prospect, judged by eastern standards. It might be supposed that the hills were long ago cut over and that fires have practically completed the denudation; but such is not the case. Those hills are just as nature made them. Thousands of years have not sufficed to develop any more forest than is there now. It is a typical hardwood stand, such as is characteristic of the California foothills back from the coast. The particular location shown in the picture is in the Sequoia National Park on the western face of the Sierra Nevada mountains; and the nature of the growth indicates that the place lies from two thousand to three thousand feet above sea level.

A lumberman accustomed to the splendid forests of eastern hardwoods will look on the picture of this California scene with feelings akin to pity for the people who have no better hardwoods. The most of the growth is little more than brush, but now and then a tree is found. That in the foreground is the California blue oak (*Quercus douglasii*) which is a fair sample of the oak timber on the hills of that region. In the bottoms of canyons and near the coast some better specimens are found. The average size of the mature blue oak does not exceed eighteen inches in diameter, with a trunk barely long enough for a short sawlog—about like an old apple tree in an eastern orchard. The picture shows a number of lumps or knots on the trunk. These are characteristic of the tree. They do not look very promising from the outside, but that view shows them at their best; for if cut open they are often found in a state of decay within, and filled with a black substance resembling half-burned charcoal. The tree belongs in the white oak group, and Californians point to it with pride as white oak. It is so much better than some of their other oaks that it looks pretty good to them. Botanists prefer to call it blue oak on account of the decidedly blue tinge of the young leaves in early spring before they take on the dull, ashen color due to dust as the dry summer comes on.

The growth is denser down in the canyon near the water. The picture does not show the trees there with sufficient distinctness to make the identification certain; but among them are probably California sycamores and white alders. The appearance of the sycamore is much like that of its eastern relative, except that it is smaller and has a trunk so forked and distorted that it looks more like the horns of a gigantic deer than like a tree. The white alder might be mistaken for its eastern cousin, the sweet birch, provided the birch is not more than half grown, for when it is old it loses the grace which remains with the white alder as long as it lives. The alder has some peculiar habits not noticeable in the birch. Its flowers hang and grow for six months, developing into catkins the shape and size of lead pencils. In the hilly regions, similar to that shown in the picture, it is not unusual for alders to be loaded with bloom and with wet winter snow at the same time.

Although the display of hardwoods is exceedingly poor in the picture, quite a different scene may be brought to view if imagination is allowed a little play. Just beyond the horizon, on the other side of the farthest hills visible, on the next rise of ground, lie the softwood forests. They are as splendid as the hardwoods in the foreground are poor. In size, the softwoods on the higher ranges as greatly surpass any timber in the East, as the eastern trees exceed the scrub growth displayed in the picture. The gifts are not badly balanced when nature does the giving. California was denied hardwood forests, but the deficiency was made up by a wealth of softwoods which are the envy and wonder of the world.

Work in the Right Direction

THAT THE NATIONAL LUMBER MANUFACTURERS' ASSOCIATION, through its able secretary, J. E. Rhodes, is doing everything possible to foster the interests of the lumber business is seen constantly in innumerable instances. Mr. Rhodes, through the various means which he has at his command is untiringly at work formulating or carrying out some policy which will eventually result to the advantage of the lumbermen of the country as a whole. One of the latest of these efforts is the successful attempt to enlist the interest of paint manufacturers of the country in an effort to secure a fireproof paint, reasonable in price and easily applied. That this endeavor is getting down to a definite basis is seen in the fact that the National Lumber Manufacturers' Association has just been invited by the Educational Bureau of the Paint Manufacturers' Association of the United States to attend a conference in Chicago on Oct. 20, wherein there will be discussed the common interest which the paint manufacturers and lumber manufacturers have in meeting the issue of the inflammability of wood, which issue is being raised by the manufacturers of wood substitutes.

Arrangements are being made to discuss the matter fully with the paint manufacturers. This, coupled with the fact that the Institute of Industrial Research at Washington, D. C., is studying methods for the protection of wooden surfaces and has already spent much time and effort in that direction, augurs well for the future of such wooden products as shingles, siding, etc. The Institute of Industrial Research is now working on methods of fireproofing and decorating shingle structures. This experiment for the fireproofing of wood will also deal with other methods than paint.

The timber testing department of the Forest Products Laboratory at Madison, Wis., is also, on the suggestion of the association, actively at work experimenting along the same line. Results of these efforts will be announced later, and all of this shows that the lumbermen of the country are not so negligent concerning their own interests as might be supposed.

Further proof of the activity of the National Association is seen in the comment it makes upon the National Fire Prevention Conference, which will be held at Philadelphia, Oct. 13-18, when an effort will be made to establish a National fire prevention enterprise embracing all the fire prevention associations of the country.

The National Lumber Manufacturers' Association in a bulletin states that lumbermen are thoroughly in accord with the idea, but that it is feared that an effort will be made by the manufacturers of lumber substitutes to put the convention on record as against wooden construction in certain forms. The association will be represented at the conference for the purpose of seeing that lumber is not unjustly discriminated against.

An Inexcusable Assertion

SOME EXCUSE CAN BE SEEN by the advocates of the wooden car in the news stories pumped into the daily press through the agencies behind the steel car movements. The gross error and injustice of most of these stories and editorial comments is too well known by the lumbermen to require further comment here. Lumbermen are willing to fight their battle for the continuance of the employment of products of the forests in the various places for which they are unquestionably better adapted than the substitutes being urged, but they are not willing to wage such a fight against a substitution of various materials of wood when such substitution has the open and unearned support of someone whose high office gives his word considerable weight, and who indulges in comments on this score with no possible evidence of proof for his statements.

Vice-president Marshall is quoted as advocating the passage of the steel car bill by giving his personal endorsement to the steel car. He said in an interview that steel cars are one of the greatest safety devices, and further: "If I stick a knife into a man I am charged with murder, but we let railroad directors use wooden cars and cause great loss of lives because steel cars cost so much money.

The injustice of this statement is appalling, and it is especially hard to realize that the vice-president of the United States would deliver such an utterance without having investigated the matter very thoroughly and without being positive in his own mind, because of the preponderance of proof in behalf of the steel car, that the wooden car really constitutes a menace.

The very fact that Mr. Marshall made this statement is proof sufficient that he did not investigate the matter thoroughly; that he did not go to the bottom of the question, simply because as an actual fact there never has existed and does not now exist any proof in any form that demonstrates conclusively the superiority of the steel car.

HARDWOOD RECORD will not take upon itself to endeavor to correct the habits of the officers of the United States government, but believes that this statement should at least have publicity.

Broad Questions of Policy

TWO LOGGING CONGRESSES in one month may be taken to indicate a wider interest and a closer study of this branch of the lumber business than formerly, though these were not the first meetings of the kind to be held. That at New Orleans dealt with some problems quite different from those of the Pacific coast congress at Spokane, because conditions are not the same in the two sections of the country. In the South the operator handles logs of small average size if compared with the Pacific coast species. The land in the South is generally much more nearly level than the western timberlands, and problems of equipment and transportation are different. In the southern region the presence of large swamps, many of which are deeply inundated during much of the year, profoundly influences the system of logging. The West has few swamps, though navigable waters play an important part in some of the heavily timbered regions.

Certain lines of work and investigation are similar in the two parts of the country, but this applies less to the actual work of cutting and transporting logs than to the social, sanitary, and esthetic sides of the question. Formerly the social side of the logger's life was not considered any part of the proprietor's business; and very little thought was given to sanitation, while amusements after work hours were wholly outside the field of the owners' activities. The men were left to their own devices and inclinations in these matters. If they wanted to occupy unclean bunks and breathe foul air, to gamble of evenings and get drunk Sundays, the proprietors let them have their way. The cooking end of the establishments were usually looked after pretty well, because experience had shown that men must be well fed or they will not be profitable as laborers. It has only recently been learned that it pays to look after their welfare in other parts of the camp besides the cook house.

Both the southern and the western meetings gave the Y. M. C. A. regular places on their programs; and the work which that association is doing for the improvement of camp conditions was discussed by hard-headed business men with as much seriousness as they gave to the discussion of tramways and the latest hauling devices. Reading rooms keep men from the gambling table; lectures cut down the attendance in saloons; and the proprictors of large operations have observed that the men show up for work on Monday mornings in much better shape than was usual before the welfare workers inaugurated new ways of entertaining the loggers.

Another feature was noticeable at both meetings. It was the presence of professional foresters who were there by invitation and had places on the programs. Twenty years ago a forester at a logging congress would have been hooted, had he presumed to give advice. Today he is listened to with close attention, because it is now thoroughly understood that cutting and slashing timber is not the whole of successful logging. Two important topics were handled by the foresters in both meetings. One was the saving of as much as possible of trees already large enough to use, and the other related to provisions for future supplies. Both are practical problems; but a generation ago neither would have been likely to receive a sympathetic hearing.

It is notable that the lumbermen of the Pacific coast are as earnest advocates of provisions looking to new growth as the southern people are, though the great timber resources of the West have yet been scarcely touched, while those of the South are feeling the drain very severely. Every western timberman knows that the Pacific forests will hold out longer than he can hope to live, nevertheless, he is ready to join any movement having for its purpose adequate provision for the future. Those western men have a broad way of looking at economical questions.

Curtailment of Statistics Not Complete

A PREVIOUS ISSUE OF HARDWOOD RECORD contained a reported statement from Washington to the effect that the officials at the head of the census bureau contemplated a curtailment and final discontinuance of the statistical work covering the cut of lumber and the various other products of the American forests. It has developed that this will eventually be only a curtailment and will not result in the complete discontinuance of this work. It appears now, however, that in the future reports on the manufactures of forest products will cover lumber only, while the reports on such other products as veneers, poles, cooperage, etc., will not be compiled.

The fact that figures on lumber manufacture will be continued as heretofore offers some consolation, but it is without doubt a serious mistake to discontinue similar statistics on other products of the forest, particularly on veneer. It is unquestionably a fact that the veneer industry is not only here to stay but is developing into one of the most important branches of the manufactures of the products of the American forests. Unquestionably the manufacture of veneers will grow to increasingly great proportions as time goes on and stumpage becomes more valuable.

Figures pertaining to the veneer business are at best incomplete and any effort which will result in taking from veneer manufactures such additional information as they can gather from government statistics on veneer manufacture, is surely a mistake.

It is to be hoped that the proper pressure will be brought to bear to secure for this branch of the trade proper consideration in this particular.

Railroad Man Endorses Wooden Car

THE REPEATED CONTENTION OF HARDWOOD RECORD that the adoption of the steel car was in most cases in spite of the better judgment of big railroad officials of the country, and was forced by unwarranted public clamor, is being proven as correct in various instances these days. The latest proof is seen in an article in the Manufacturers' News, written by S. N. Felton, president of the Great Western, in which he discusses at some length the matter of steel cars.

The old "fire scare" excuse which was given as part reason for the abolition of the wooden coach is refuted in Mr. Felton's article, in which he states that the abolition of oil and gas for illumination purposes makes the wooden car as safe as the much desired steel car of today.

Mr. Felton's opinion of the steel car as a protecting factor in railroad passenger transportation follows:

"The danger of the wooden cars from possibilities of fire in connection with accidents has been largely removed by the introduction of steam heat and electric lights and the entire absence of any oil or gas. The added strength supposed to be secured from the steel car construction has not been satisfactorily proven, for the reason that with the advent of the steel car very much heavier locomotives were required to haul the trains. These heavier locomotives, with heavy steel equipment behind them, running at high speed, in case of accident became more destructive than any of the trains in the days of the wooden car; in fact, we have records of complete destruction of steel sleeping cars in rear-end collisions, and it would be impossible to build a steel car that would resist the shock of a rear-end collision from a train running fifty or sixty miles an hour. It is only necessary for a person to look at the immense Pacific type passenger engines standing in any of our stations and one of the steel cars and consider the result of a collision between them at such speed. There is little doubt but what steel sleeping cars in the recent accident on the New Haven road would have been as completely destroyed as the wooden cars. Nothing could have resisted the impact of the following train running at such a high rate of speed."

The lumber trade should take heart from this declaration coming from a source absolutely unbiased as far as the merits of the two types of car construction are concerned.

The article illustrates the fact that while the public clamor for steel cars is blinding the eyes of our officials at Washington, the practical railroad man, who is in a position to know, is alive to the real condition of things.

Clever Ad Makes Lumber the Goat

THE MANUFACTURERS OF INNUMERABLE ARTICLES wherein various materials are substituted for lumber, are surely making an impression upon the lumber trade. Every day brings out some new article of this sort, the real merits or demerits of which are usually concealed in cleverly written advertisements which rely for their pulling power upon a comparison with similar articles made of wood, and in which the effort is usually made to prove the immense superiority of the new type of construction.

One of the latest of these is "shop boxes." A metal concern is

turning out this line of goods and advertises by showing two illustrations and leading off the ad with the following statement:

"A big reason for steel shop boxes—they cost far less than wooden ones."

This ad is very cleverly gotten up and is unquestionably one which would deceive the man who did not actually know the real cost of the two types of articles. The leading statement, being frank in wording, necessarily leads one to look for conclusive proofs to follow. The proofs that are really given would unquestionably be sufficient in most cases, but an analysis of them shows that they are very much involved and really make no definite statement. According to the ad the advertiser asks the reader, in an offhand way, to concede that of course the steel box is easier to handle, and is of better appearance, and is more durable than the wooden box. It asks this concession merely on the statement that such is the case without offering a semblance of proof to substantiate the claim. It says, however, that the big fact is that the steel shop boxes cost less and offers in proof merely the following:

"The trouble is you don't know how much wooden boxes really cost, because you don't count how many you buy in the year, or figure out how long they last. If you did, you would quit buying wooden boxes."

Judging from this statement there seems to be a very serious question as to whether or not the concern advertising this box knows itself how many wooden shop boxes the average buyer purchases in a year or how long they last, inasmuch as if it had such figures it would surely not neglect to use them. In fact, the ad is but a cleverly worded affair and offers an excellent illustration of the ways the substitute people are going about the game of securing a market for their products in the face of superior products made of wood.

A Shipment With Significance

A SHORT TIME AGO it was announced at Baltimore that the first cargo of lumber consisting of a 200,000 feet shipment had cleared for Buenos Aires. Shipments of hardwood to South American ports are not uncommon, but this particular shipment is entering a port in a country which has an abundance of hardwood timber of its own, and it would indicate two things. In the first place it is very likely that the cost of logging and lumbering of Argentine hardwoods would be too great, and the lumber itself would realize too small a price to warrant the necessary investment. On the other hand, it might be the policy of South American countries to conserve their hardwood timber in anticipation of the time when shipments from this country will not be as readily forthcoming as now. It may be that they are looking forward to the time when South American hardwoods will be supplying many markets now drawing their hardwood lumber from United States ports.

It is more likely, however, that it is simply a question of insufficient development in the lumber business of Argentina. Nevertheless it is a fact that this shipment has been made, and it should certainly lead to further shipments on the part of American exporters of hardwood lumber.

Northern Lumber Cuts

REPORTS FROM THE NORTHERN HEMLOCK & HARDWOOD MANUFACTURERS' ASSOCIATION show that the cut of hardwood and hemlock in August was approximately the same as in July. The hardwood cut was carried further into the summer this year than is usual, but in hemlock there was very little variation in sawing during the past three months.

On the other hand, there is a decrease of practically ten per cent in hardwood shipments, while the shipments of hemlock were approximately the same as in July. Figures for the twelve months preceding August indicate that the general condition through those twelve months has not been so satisfactory as was desired. As an illustration the hardwood production during that period was three per cent greater than shipments, while on the other hand shipments of hemlock exceeded cut by sixteen per cent.

The total movement of hemlock and hardwoods, however, was satisfactory for northern manufacturers as the combined shipments exceeded production by seven per cent since the first of September, 1913.

The following interesting figures from seventy-one firms reporting for August give an excellent graphic illustration of the lumber conditions in the North during August:

	Sawed		Shipped	
	Firms	M. Ft.	Firms	M. Ft.
HEMLOCK	54	50,775	62	38,486
Ash	29	553	26	1,094
Basswood	36	3,355	48	4,443
Beech	5	300	..	....
Birch	38	6,250	51	10,296
Elm	33	1,583	36	2,538
Maple	34	8,247	38	5,869
Oak	15	305	12	297
Mixed	16	4,513	16	3,158
ALL HARDWOODS		25,106		27,695
Total Hemlock and Hardwoods		75,881		66,181

Steamship Companies Concede to Shippers in Marking Controversy

AS NOTED IN DETAIL elsewhere in this issue of HARDWOOD RECORD, the representatives of the lumber trade who journeyed to New Orleans for the purpose of discussing the new rulings on export lumber markings, were successful. The companies have stated that for the present they will not insist upon the application of the new rules in this particular, but those who attended the conference express themselves as confident that the matter is definitely settled in behalf of lumber shippers, and that no fear need be entertained that the matter will again be brought up in the future.

The utter impracticability of the proposed demands was clearly demonstrated to officials of the steamship companies by the lumbermen attending the conference. It seems that the steamship lines have been hasty in their conclusions regarding losses due to claims that have resulted because of mischecking the character of shipments upon arrival at foreign ports. The lumber carriers seemed to be of the opinion that these losses were the result of improper marking on the part of the shippers, who on the other hand clearly demonstrated that in order to guarantee satisfactory arrivals of shipments, a thorough checking system whereby each piece would be checked according to mark and not merely according to number and size would be necessary.

Steamship employes in handling lumber shipments seem to work on the theory that a mere checking of the number of pieces loaded at American ports and unloaded at foreign ports is sufficient, and overlook entirely the markings upon each piece designating its grade and hence its value, constituting the real basis on which the shipments were made. Naturally the receiver of lumber in a foreign port is not satisfied with so many thousand pieces of a poor grade when he has ordered that many pieces of a better grade of lumber.

This seems to be the gist of the controversy, which, however, appears to be now placed upon an entirely satisfactory basis.

Reforestation Not Advocated

IT HAS BEEN SO MUCH THE FASHION to advocate reforestation of vacant land from which timber has been cut, that a voice raised on the other side of the question attracts attention. This occurred at a recent meeting of the Northern Forest Protective Association.

The northern peninsula has 10,460,000 acres of land, enormous tracts of which are practically without inhabitants. It is claimed that much of it is valuable for farming purposes, though some of it can not be so classed. The proposition is to designate the good agricultural land and not only put it on the market, but go out and find good settlers, as the Canadian Pacific railroad does, and give them a start. A free gift of certain designated forty-acre tracts, intelligently distributed over the country, is advocated, but to men only who will improve the land and make it a model for others to see.

Pert, Pertinent and Impertinent

The Busy Editor

After the fire that destroyed Barnum's Museum, the proprietor consulted his friends as to his wisest course. He told them he had a fortune, and could easily retire from active business.

Among his friends was Horace Greeley.

"What shall I do?" asked Barnum.

"If I were you," replied Greeley, "I would go fishing. I've been trying for thirty years to go fishing, and have never been able to do it."—*Youth's Companion.*

Air in a Trust

Reader—"He tore his hair and rent the air."

Hearer—"There you are! We even have to rent the air now. It's time we had a change of government."—*Pathfinder.*

Logical

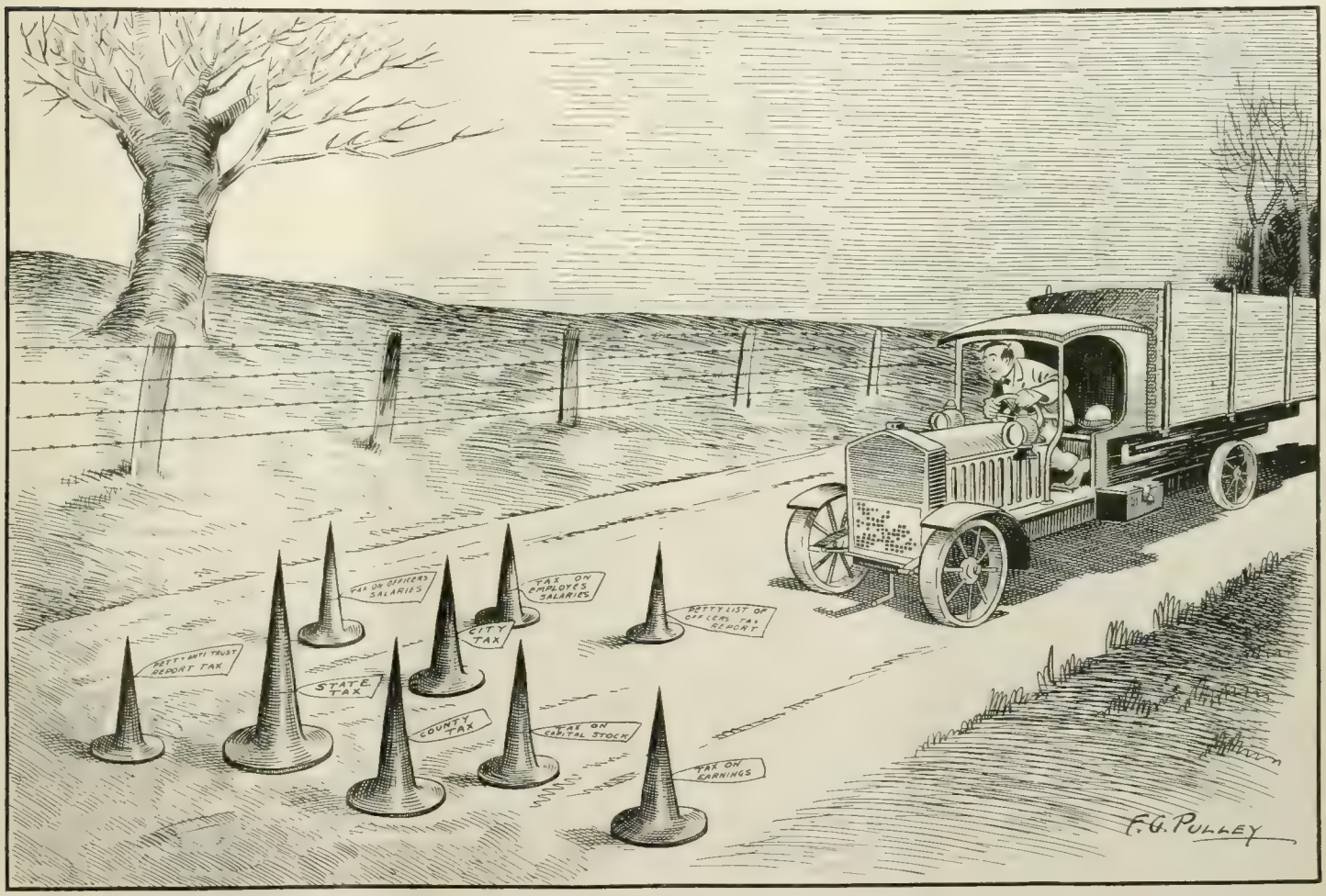
"Why, Bridget, you surely don't consider these windows washed?" said the lady of the house, reproachfully.

"Sure, I washed 'em nicely on the inside, mum, so we can look out," replied Bridget, "but I intintionally lift thim a little dirty on the outside, so thim ignorant Jones children nixt door couldn't look in."

Personalities

While James McNeill Whistler, the eccentric American painter, was trying on a hat in a London shop one day, a customer rushed in, and, mistaking Mr. Whistler for a clerk, exclaimed: "I say, this 'at doesn't fit." The artist eyed him for a minute, and then replied, scornfully: "Neither does your coat, and I'll be hanged if I like the color of your trousers."—*Exponent*

SOME "TACKS"



Driver: If anyone can get down this road without having a flat tire he is a genius.

Unnecessary Expense

An energetic young priest in charge of a parish in Cambria County, Pennsylvania, had succeeded in raising money enough to build and equip a new church, all except the bell. To get enough money for the bell, he held a meeting of the parishioners, at which the members of his Building Committee made speeches. All except McCarthy had spoken. One mentioned their fine church; another, their comfortable pews; another, their splendid altar; and another spoke of the steam heat they had in the church and of the coal in the cellar for the furnace. They were all sorry, they said, that they were without a bell and hoped the members would be able to make a further effort and secure the money for that purpose.

Then came McCarthy's turn and he spoke as follows: "We have a fine church. Our pews is comfortable and our altar is grand. 'Tis true we have no bell. But," said he, "we have steam heat in the church and plinty of coal in the cellar. The divvle wid the bell. Let's put a whistle on the church."—*Everybody's.*

Cause for Alarm

Bill Sprauge kept a general store at Croyden Four Corners. One day he set off for New York to buy a lot of goods. The goods were shipped immediately; and as Bill had lingered in New York sightseeing, they reached Croyden Four Corners before him. The goods in an enormous packing-case were driven to the general store by the local teamster. Mrs. Sprague came out to see what had arrived and, with a shriek, tottered and fell.

'Oh, what's the matter, ma'am?" cried the hired girl.

Mrs. Sprague, her eyes blinded with tears, pointed to the packing-case, whereon was stenciled in large black letters:

BILL INSIDE.

—*Everybody's.*

Requisite

"I understand you speak French like a native."

"No," replied the student; "I've got the grammar and the accent down pretty fine; but it's hard to learn the gestures."—*Washington Star.*

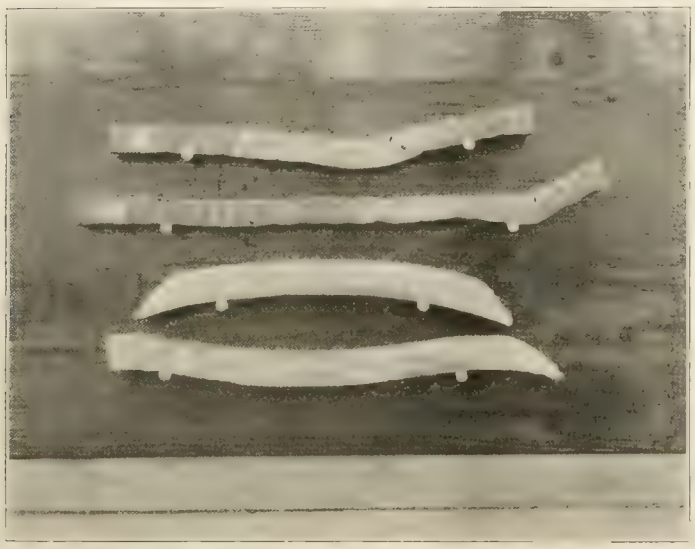
Eucalyptus Lumber

Abstract of Report by H. D. Tiemann, Forest Products Laboratory, Madison, Wis., U. S. Forest Service, Department of Agriculture.

PART II

There is a physical limit to the rate at which any piece of wood can be dried, which is the rate at which moisture can be transmitted through the body of the wood itself. If the surface evaporation is more rapid than the rate of transmission from the center outwards, "casehardening" or surface drying results, inevitably followed by honeycombing.

It is supposed that temperature increases the rate of transmission



SECTIONS CUT FROM KILN-DRIED BLUE GUM BOARDS, SHOWING HOW THE BOARDS WARP. C AND D ARE BOTH FROM THE SAME BOARD, C BEING ALL SAP AND D MOSTLY HEART.

of moisture through wood, hence the object in drying at as high temperature as possible. But nothing definite is known in this regard. Moisture travels away from the warmer toward the colder portions of the wood, hence the necessity of having the lumber warm clear through.

All things being equal, the higher the temperature, with correct humidity, the quicker and better the wood ought to dry. However, many factors modify this deduction, especially with blue gum which becomes very soft and punky when it is heated in the moist condition, even below the boiling point; and above 212 degrees it resembles putty to a surprising extent. It seems altogether improbable, therefore, that blue gum can be successfully dried at high temperatures. Superheated steam would be entirely disastrous to this wood. When the wood becomes dry the temperature may be considerably raised without injury. It seems apparent from the eucalyptus experiments that the high temperatures while moist greatly increase the amount of shrinkage, so that the best results ought to be obtained by the lowest temperatures.

All woods partake of the nature of a colloid, as glue or gelatine, to some extent, some species much more than others. Blue gum, at least the smaller trees, partakes of this nature to an exaggerated degree. In fact, it behaves more like glue in its hygroscopic relation than it does like other woods. It has the remarkable property of shrinking upon the slightest loss of moisture from the green condition, and continues to shrink at a steady rate until perfectly dry. Other hardwoods show little or no shrinkage until they have dried to their "fiber saturation" point, which generally lies between twenty and thirty per cent moisture on a dry weight basis. With blue gum the shrinkage begins at from seventy to eighty per cent moisture.

In conducting this investigation it was decided to determine, first of all, whether even the best of blue gum lumber could be dried satisfactorily by the slowest and most careful method. Then if good results were obtained, poorer grades might be tried.

Two relatively large trees were selected for the first experiment, from a grove in Piedmont, one a very thrifty tree two and one-half feet in diameter and the other about two feet. Both were sawed into inch boards as soon as felled and sent immediately to the dry-kiln. The boards were divided into three groups, and treated as follows:

1. Boards of the first group were all marked S, and were first steamed at a slight pressure of one or two pounds for three and a half hours, then doused in a tank of water at a temperature of 150 degrees. They were left in the tank with the W boards over night, with a little heat turned on the keep the water warm.

2. Boards of the second group, marked W, were put in cool water which was heated to 140 degrees in twenty minutes, two hours before the S boards were introduced.

3. Boards marked A were not given any preliminary treatment.

At nine next morning the temperature of the water in the tank containing the S and W boards was 194 degree F. At 2:15 p. m., when the boards were taken out and piled on the truck, it was 142. Just twenty-five hours after the W boards were placed in the tank, and twenty-three hours after the S boards were removed from the



PIECE OF BLUE GUM VENEER WHICH ACTUALLY "WALKED AWAY."

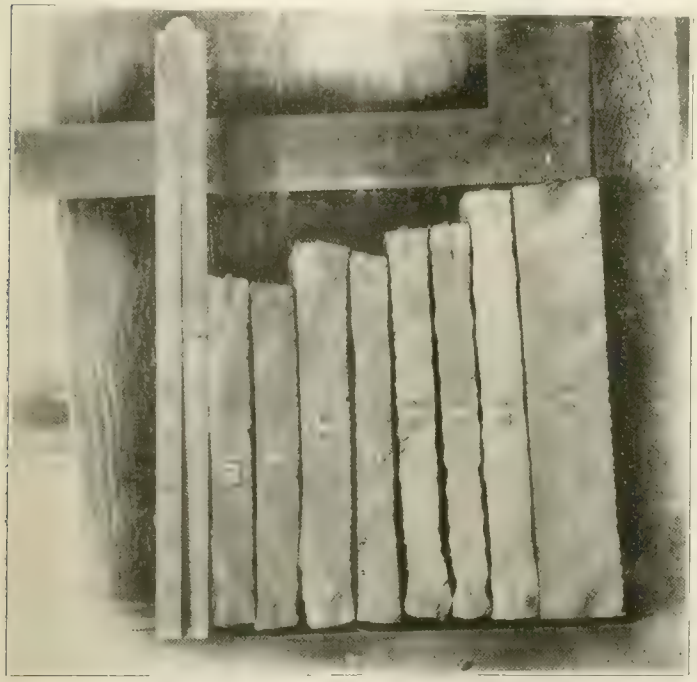
cylinder and doused in the tank, the truck was run into the first compartment of the kiln, designated "Section I." Sample pieces of each were taken. Weights before and after treatment were: S before, twenty-nine pounds; after steaming and soaking, twenty-nine and one-half pounds. W before, twenty-one and one-half pounds; after steaming and soaking, twenty-two pounds. The conditions of Section I of the kiln were:

	Just after placing in Section I. At 3:20 p. m.	At 5 p. m
Temperature near roof west side	129	126°
Temperature halfway up west side	130	129°
Temperature under spray of lumber, west side	117	123°
(dew point temperature)		
Calculated humidity west side	71%	83%
Humidity by hair hygrometer east side	52%	82%

All boards marked A were placed on one truck and run into the middle compartment, "Section II," of the kiln at 12:45 the same day, after first thoroughly wetting the lumber with a hose. The conditions in this section were:

	Just after placing in Section II. At 1 p. m.	At 5 p. m.
Temperature near roof, west side	126	127
Temperature halfway up, west side	124	129
Temperature under spray chamber, west side (dew point)	112°	123°
Calculated humidity, west side	71%	83%
Humidity by hair hygrometer, east side	60%	72%

The manner of piling received special attention, as it is of great importance. For good drying, uniform circulation of air is essential so that both faces of the boards shall dry uniformly. Edge piling gives the best possible result, but it is difficult to perform, and the trucks were not suited to this kind of piling. Therefore, the next best thing was adopted. A wooden frame was set on the trucks with



END VIEWS OF SHRINKAGE SPECIMENS. THESE WERE ALL ORIGINALLY THE SAME WIDTH, 9 INCHES.

sloping rafters like an inverted roof or letter V. The rafters were spaced eighteen inches apart, with a slope of less than thirty degrees. The boards were carefully laid, using 1½ by ¾ inch stickers, edgewise, and eighteen inches apart. Spaces were left between the boards in each layer. In the center of the pile an open, tent shaped space was formed, the top of the pile being closed all the way across. The first layer of boards at the lowest point was about thirty inches above the steam coils. The boards were weighted by a number of partially dried planks.

Sample sections three feet long were cut from one board of each lot, and also moisture discs. From the moisture determinations of these discs the dry weights of the samples were calculated. By weighing the samples daily the rate at which the drying was proceeding was kept track of. These samples were placed in the loads the same as the rest of the boards, about halfway up the pile, a gap having been provided for them. The original moisture contents, in per cent of oven dry weight, when put into the kiln were as follows:

Sample S, quarter-sawed 87.0 per cent; sample W, quarter-sawed, 84.8 per cent; sample A, slab-sawed, 98.1 per cent.

The drying was begun at a temperature less than 130° and a humidity about ninety per cent. Throughout the experiment the same conditions were maintained at night as during the day. No free steam was allowed to escape into the kiln. The air circulation was about 200 cubic feet per minute for every foot length of the kiln.

The wood began to shrink almost at once, and in three days' time corrugations on the surface were decidedly evident. At that time the samples showed the following moisture content: Sample S, 76 per cent; W, 72 per cent; A, 84 per cent.

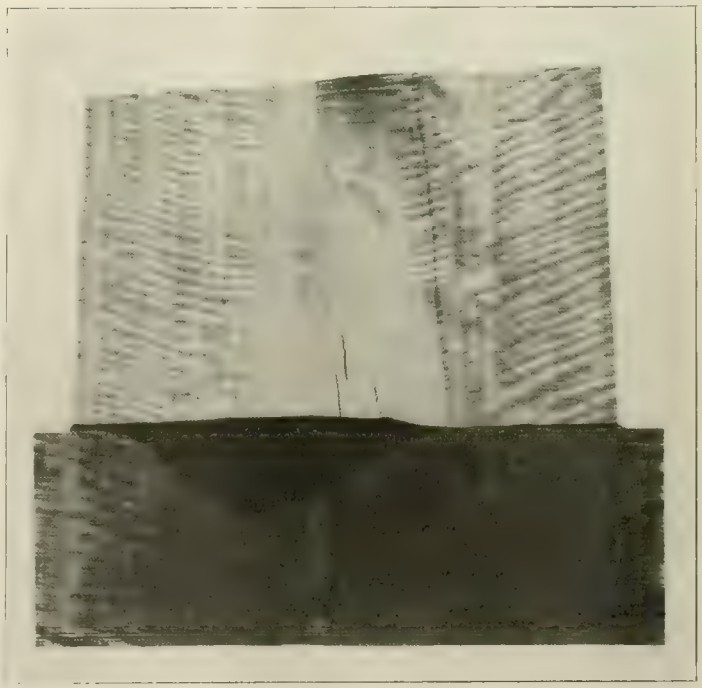
As the wood became drier the humidity was gradually decreased and the temperature raised, in order to keep up a fairly uniform rate of drying, until at the end of the operation the temperature readings were 160° on the west and 170° on the east side of the kiln. In twenty-seven days the wood was ready to take out.

The lumber had been dried with little or no honeycombing or checking. It had greatly shrunken in every case, chiefly in the circumferential direction of the ring. The shrinkage was very uneven, alternating in amount with the alternate bands of light and dense wood, the lightwood shrinking most. This gave rise to a very curious corrugating of the surface of all quarter-sawed boards, the corrugations running lengthwise, and as deep as the corrugations in an ordinary washboard. The quarter-sawed boards remained flat. The slab cuts, however, were generally warped, the heartwood portion bending outward, but the sapwood portion, strange to say, in the reverse direction, so that a slab-cut board, containing heartwood in the central portion and sapwood on the edges, bent with double curvature, the cross section resembling a flying bird in outline.

Many of the boards were wavy in the lengthwise direction. Closer spacing of stickers would have helped this condition somewhat.

The average moisture content of the lumber taken from the kiln, as determined by thirteen samples, was slightly over 8.5 per cent, varying from 6.2 to 11.8 per cent.

In regard to the three kinds of treatment, there appears to be very little choice. If anything, it appears that the wood previously boiled in water was bent more than the others. In fact, the wood which was placed in the kiln directly without previous treatment was in as



COMPARISON OF KILN-DRIED SAMPLE A 110 WITH ORIGINAL WET BOARD FROM WHICH IT WAS SAWED.

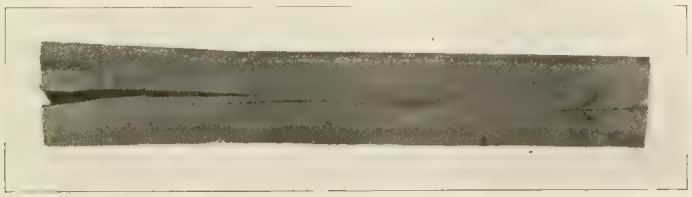
good shape as any. Steaming and boiling appear to soften up the blue gum so that it does not hold its shape so well.

In order to give some idea of the proportional amount of lumber from this selected material which would finish up into at least half-inch boards of three feet or more in length, the boards were sorted and weighed. The proportion of good boards in any one of the three treatments depended more upon the number of radially-cut boards included, than upon any difference observable due to treatment. No significance, therefore, can be placed upon the relative amounts of good and bad as between the three treatments. The whole lot weighed 1,885 pounds—good boards, A 365, S 340, W 170, total 875 pounds; poor, due to warping, A 415, S 175, W 420, total 1,010 pounds. The

proportion of good boards was 46.4 per cent. It must be remembered that the selected material represents an extremely small percentage of the growing timber. Practically no honeycombing or checking occurred in any of the radially-sawed material, and very little in the tangential.

From examples examined, a diameter of at least sixteen inches appears to be requisite before the better quality of wood begins to be laid on the growing tree. The density of the wood dried in this way is so great that, with the exception of sapwood, it sinks in water.

A piece of "San Jose gum" which was dried with the others was



INCH BOARD SAWED DIAMETRICALLY THROUGH THE CENTER OF A FRESH BLUE GUM LOG, SHOWING EFFECT PRODUCED BY THE INTERNAL STRESSES.

from the lower log of a tree over three feet in diameter. It shrank much less than the other and was warped and corrugated but little.

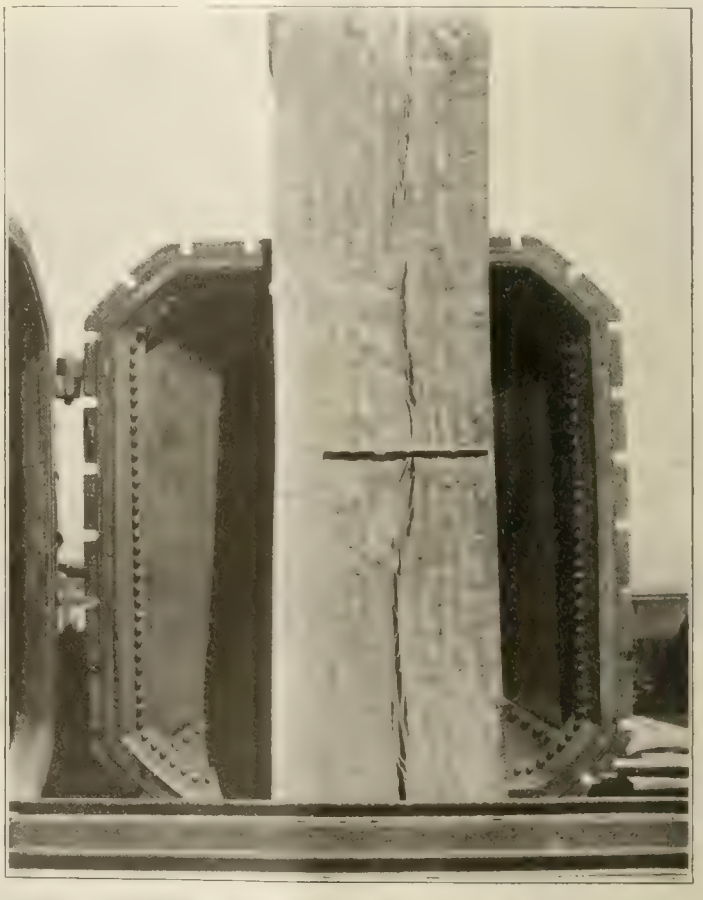
The previous experiment having shown the futility of attempting to dry the ordinary run of blue gum for lumber, it was decided to determine whether the largest of the ordinary blue gum trees were not equal to the "San Jose gum." For this purpose one of the finest and largest trees growing in the region near Piedmont was obtained. It was one of a splendid row, had clear trunk of twenty-four feet, total height of 102, and measured thirteen feet in circumference, breast high. It was said to be forty years old, but an estimate of the rings gave thirty-six. Two logs were cut, the butt log numbered 110, the top 111, and they were cut in 1⅛ inch boards and a few pieces of ⅛ inch veneer. The entire tree was of remarkably curly grain. Three of the boards measured 34⅜ inches in width. The moisture content of a sample of 110 was 90.3 per cent and of 111, 90.5 per cent. A portion of the boards was steamed two hours at atmospheric pressure, then doused in water at 150° F. These boards were marked S. A few were left in the cylinder and steamed one and a half hours longer at three pounds pressure, then also put into the tank. The next day all were piled on trucks in the same manner as in the previous experiment, together with unsteamed boards marked A, and the trucks were run into the kiln. The drying was begun at a temperature of from 130 to 133° F. and humidity of 82 per cent. The boards were piled on two trucks and run into Sections II and III. During the first five days the temperature of Section II was maintained at 135° and Section III at 143° and the humidities gradually reduced from 80 to 60 per cent. The temperatures were finally raised to 160 and 170° respectively, and the humidities reduced to 44 and 42 per cent.

In fifteen days sample A 110 reached its minimum moisture condition of 4.3 per cent. The two other pieces, A 111 and S 111, still contained 8.8 and 11.1 per cent respectively. At the end of seventeen days they ceased to lose weight, and the load was ready to take out. Discs cut from eight boards in Section III showed a moisture content of from 3.6 to 6.7 per cent, average 4.8 per cent, and from seven boards in Section II, of from 5.4 to 9.2 per cent, average 5.8 per cent. The boards had dried with no honeycombing, and practically no checking, except through the center of the boards sawed from across the center of the logs. The shrinkage, however, was great, especially toward the center of the logs, and there was a great deal of warping. The curly-grained boards warped in an undulating manner in both directions, somewhat like ripples on water. The straight-grained boards warped as in the previous experiment. Three of the boards from log 110 were originally 34⅜ inches wide. These shrank to 32 3/16, 31¼, and 30⅞ inches. There was no honeycombing. On account of the curly grain this wood was not corrugated in parallel ridges, as in the straight-grained wood, but was rippled in fine diagonal lines. The shrinkage of this tree was much less than in former experiments. The boards were sawed full 1⅛ inches. After drying they measured from 13/16 to even 1⅛ inches in places, according to whether the boards were radial or tangential. They averaged about one inch in thickness. It would be impossible, however, to plane them to this thickness, since the surface is undulating. This wood does not sink in water. It is pinkish in color on the cross section and resembles more nearly the San Jose specimen, but, unfortunately, a direct comparison is not possible on account of the curly grain.

There appeared to be but little difference as to preliminary treatment, as in the former case. The untreated material dried as well as the steamed. The latter seemed more plastic than the untreated, and sagged more between the stickers.

Additional tests were made in this run of the seasoning qualities of different species of eucalyptus. Three trees of manna gum *(Eucalyptus viminalis)* were cut near the dry kiln, and logs about eighteen inches in diameter were sawed into 1⅛ inch boards. After seasoning in the kiln the boards had shrunken, corrugated, and warped as much as the poorer pieces of blue gum, except the sapwood. The sapwood—and this alone—dried as well as would a piece of ash. This seems to account for the apparently anomalous occurrence of pieces of manna gum which dry fairly well—they are evidently all sapwood.

Some boards cut from blue gum were kept three weeks in a red-



LARGE QUARTER SAWED BOARD NO. A 110 THOROUGHLY KILN-DRIED. NOTE THE CHECKING THROUGH THE HEART BUT NOT ELSEWHERE, ALSO THE CURLY GRAIN. THE RULER IS TWO FEET LONG.

wood tank of water at a temperature of 150°. When removed they had turned to a bluish-black color, changing to almost jet black. When this lumber had been seasoned in the kiln it showed no advantages over similar pieces from the same trees dried in the previous experiment.

Some boards were cut from two dead trees. One was two feet in diameter, and when felled the dead leaves were still adhering to the branches. The other tree had evidently been dead several years, as

the bark had fallen off. These logs were quarter sawed and showed considerable internal stress. They were badly checked throughout. Although the wood appeared to be fairly dry, a block placed on a cold iron surface soon condensed moisture on the iron, showing that it still contained considerable moisture. The boards from the dead trees, in the process of seasoning, did not shrink as much as the other blue gum, but the boards were of poor quality with many checks.

Several boards were sawed from a red ironbark tree *(Eucalyptus sideroxylon)* near Piedmont. The boards were of a beautiful salmon-pink color, but the tree was imperfect and knotty. In the process of seasoning in the kiln, this wood showed no objectionable shrinkage, very little warping, and no corrugating or honeycombing. It resembles black cherry wood, except that it is much harder. It is much heavier than blue gum, but of more uniform texture, and, unlike the latter, the shrinkage appears to be uniform, which is a consideration of the first importance.

The three-foot piece of "San Jose gum" which was dried in the first experiment, was placed in the kiln with the second experiment to see if it would shrink further. When removed, it showed no additional shrinkage, and a test gave six per cent moisture. This behaves like a better wood than even the largest and best of the Piedmont trees. The particular specimen of this wood is of a pinkish hue, saws smoothly, and is neither so hard nor so heavy as the other blue gum wood.

The experiments were continued the following winter, and the former results were substantiated. In addition to this it was found that the higher the temperature while the wood is moist, the greater is the shrinkage. Boards which had been set aside from the former experiments which had air dried about eight months were included in the runs. These showed a very slight advantage over the similar pieces dried green the previous winter. The conclusion is that the lower the drying temperature so long as the wood is still moist, the better the results.

Another test was made on the "San Jose gum." A freshly sawed 1½ inch board 12 feet long and 20 inches wide without defect was procured from Mr. Gillespie. This came out in excellent condition, the moisture being reduced from 47.5 to 11.4 per cent and the shrinkage in thickness being quite normal for good hardwood. The shrinkage varied from 7.3 per cent of the original size on the inner edge of the board to as little as 2.2 per cent on the outer edge.

In addition to this, other species of eucalyptus were experimented upon, including three small ten year old trees of "red mahogany" *(E. resinifera)*, the largest obtainable in the state, one fair-sized tree of sugar gum *(E. corynocalyx)*, and also several pieces of acacia. The most striking result of this last experiment was the difference in the manner in which all the species of eucalyptus, with the exception of the sugar gum, dried as compared with the acacia. The acacia came through in splendid condition, as good as ash lumber, whereas the eucalyptus looked like scrap in comparison. A fair-sized tree of red gum *(E. rostrata)* which was sawed into inch boards came out shrunken and twisted. Several other species of eucalyptus were but little better.

The sugar gum, on the contrary, was nearly as good as the acacia.

As to the red mahogany, the trees were too immature to draw a fair comparison, and it will be necessary to wait at least ten or fifteen years before a positive statement can be made concerning the quality of the lumber of this species grown in California, although the tree looks promising.

The conclusion clearly follows, both from a study of the authorative literature and from the Forest Service drying experiments, that *blue gum under two and a half to three feet in diameter and less than forty or fifty years of age should not be considered as a lumber-producing tree,* and that *even the older trees are inferior to several other species of eucalyptus.* Of these species the red mahogany *(Eucalyptus resinifera)* appears to be promising for general planting through California, and the sugar gum *(Eucalyptus corynocalyx)* for localities free from frost. The former grows in California only about two-thirds as fast as blue gum, and the sugar gum is not a large tree and apt to grow crooked. The tooart *(E. gomphocephala)* is largely an unknown quantity in California, but may sometime prove valuable for lumber.



Distribution and Uses of Ironwood



With the rapid cutting of our more common and valuable hardwoods, we are constantly on the lookout for new woods to take their places in the ever increasing lines of utilization that are being demanded of our hardwood supplies. In this way, beech and sycamore, and in more recent years red gum, were developed and now play an important part in our markets for flooring, interior finish, general woodworking and furniture material.

Ironwood is not at present an important factor on our markets and probably never will reach the importance of the woods just mentioned, but it is distributed over such a wide range and produces a wood of such high technical qualities that it will soon fill a place on the markets, at least locally, for a great variety of uses. It is found all over the East from Cape Breton in eastern Canada west to northern Minnesota and the Black Hills of South Dakota (one of the few places where our eastern and western trees meet). From these northern and western limits it reaches south to northern Florida and eastern Texas. It occurs as a scattered tree throughout our hardwood forests. Little attention has been paid to it in the past because of its scarcity and comparatively small size in the greater part of its range. But in portions of the South, along the Appalachian mountains and in New York, it commonly grows up to two feet or more in diameter and ninety feet in height.

There are several trees in this country which go by the name of ironwood, especially tropical or sub-tropical varieties in the South. Ironwood (*Ostrya virginiana*) is also called hop hornbeam or hornbeam. It is in the birch family and its wood closely resembles that of red birch in texture, but not in weight or color.

Its wood may be described as being very hard, heavy, tough and very durable. Its name is well deserved. The wood has a specific gravity of .83, and among our common hardwoods is exceeded in weight only by hickory. In color it is light brown, with pale white sapwood. Both heart and sap become a distinct brown when seasoned. Like the birches the wood is diffuse-porous with fairly distinct layers of annual growth and indistinct, fine, medullary rays.

The hard, tough, durable qualities of ironwood make it an admirable wood for certain specialized uses, especially where resistance to impact is necessary. It is very difficult to split and with this exception, it can be used to a great extent as a substitute for our rapidly disappearing hickory and in some cases white oak.

Some of the more common lines of utilization in which ironwood may be now found are for brake blocks, piling blocks, sills where great strength and durability are required, tool handles, agricultural implements, posts, hames, and general woodenware where strength and toughness are demanded. It is also being used for bobbins, spools and shuttles along with dogwood, persimmon and paper birch, and for chair rounds and legs. Other specialized uses for which its good technical qualities make it adaptable are mauls and sledges where hardness, weight, and resistance to impact are demanded. It is well adapted for use as vehicle and implement stock and it is very probable that it will be called upon to take the place of hickory and white oak in a great many of its specialized uses. In many ways it also resembles dogwood, which is being demanded more and more for certain lines of wood utilization. Little known species like ironwood will be welcomed to help supply the growing and varied demands for the products of our hardwood forests.

N. C. B.

The Philippine Lumber Situation

Much has been said and written of the unexploited timber wealth of the Philippines, and, although the world has an unsatisfied appetite for a diet of hardwood, it is only lately that the virgin forests in our island possessions have echoed blows from the lumberman's axe and the muffled hum of the mills' saws.

For fear that organized capital,—a power decidedly necessary in this progressive age for the profitable promotion of any project, would acquire harmful control of the fields, probably to the detriment of the natives, the government of the islands for nearly a decade made logging concessions of any magnitude difficult to secure. Lumbering interests, however, knocked so persistently at the doors of the Philippine preserves that the Forestry Bureau finally opened up the marvelously rich forests to modern methods of lumbering. As a result American commercial organizations, so long held in check by adverse governmental restrictions, are now invading the unworked fields just as prospectors rush into the domain of new gold discoveries. The limit of each concession is defined by the bureau and usually covers a period of twenty years, at the end of which time it is proposed to put the concessions up at auction for sale to the highest bidder.



AN AMERICAN HARDWOOD SAWMILL YARD IN THE PHILIPPINES.



PHILIPPINE LOG TRAIN AND NATIVE LABORERS, SHOWING CHARACTER OF SAWLOGS.

In Spanish times little or no effort was made to work the vast timber resources of the archipelago. The ambitions of the ruling power and of the natives themselves ended when enough lumber was taken out for domestic purposes, such as house building. Little, if any, exports were made, although some small shipments of a certain kind of wood were sent to China, where, it is said, a particular variety brought its weight in silver.

In olden days getting out a single log by felling it far off from the regular roads and dragging it by perhaps a dozen yoke of carabaos often required days of the most tiresome toil for man and beast. Then again, sawing a single log as hard as adamant by hand process into boards under the very best of conditions took fully as much time as getting the raw product in from hills, often longer.

Resident Chinese were among the first to take advantage of the Spanish delay in using more efficient methods in reaping the bountiful harvest, by building mills in the larger cities, principally at Manila. These mills, while insignificant compared to our monster mills in the West, were, nevertheless, a decided advance over the primitive means of making lumber at that time. By working night and day they could not so much as meet the demand for lumber in the cities where they were located. Hence, the old hand-sawing methods were still popular when the Americans came.

Another drawback to the operators of these plants was their inability to get logs. The Chinese were smart enough to build mills, but they were unequal to the task of taking out timber after the American way. In spite of these things the mills were so prosperous as to be an object lesson to observing Americans as to what results might be obtained



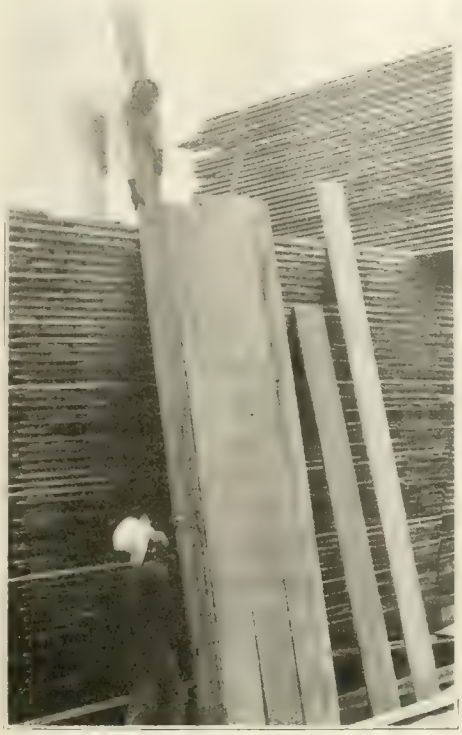
SHOWING MODERN CHARACTER OF PHILIPPINE LOGGING OPERATION.

with modern logging apparatus, bigger and better equipped mills, and a more liberal policy on the part of the government in the matter of concessions.

Some of the Philippine woods rank high for furniture, finish and other fine work. Japan has been drawing upon the supply for some time. The Filipinos often burn wood in household fires or use it for the roughest sort of construction that foreign manufacturers would be delighted to have at fancy figures to put into expensive bric-a-brac of all kinds. Most of the better class native homes are built entirely of hardwoods, outside and inside. The doors and paneling are generally artistically carved by hand by native workmen; and the floors, usually of boards from eighteen to twenty inches in width, are brilliantly polished, and no varnish or other pressing material is required as a finish.

In the absence of favorable laws at the beginning of American occupation, Americans were either compelled to forego timber cutting entirely or to engage in it on a small scale. Two American furniture factories were established in Manila to compete with the product turned out by Chinese factories. The American establishments have now been consolidated and the concern has gone into lumbering on a large scale under more liberal terms offered by the government. The first large mills put in operation by Americans were located on the island of Negros, where timber is plentiful, and Mindoro island is not far distant where large supplies await the operator.

In the early days of occupation a number of pioneers willing to take what the government at the time was willing to give and with the hope that opportunity would be given them to branch out and increase their holdings as conditions industrially and politically might later warrant, went into logging and milling in a modest way in the southern islands of the group. The mills, of course, were naturally small, but they were of the best equipment for profitably marketing the material taken out. Now these operations have grown into giant industries and others are coming to help them harvest the wealth of the forests. The plants have increased two and three fold in capacity, logging roads have been built for miles into the dense woods radiating out from the mills as spokes do from the hub of a wheel. Some of the concerns are operating their own vessels between Philippine ports and the United States, and busy little villages, comfortably housing the Filipino laborers and mill officials, have sprung up about each milling property.



"PHILIPPINE MAHOGANY" SHOWING CLEARNESS AND LENGTH OF STOCK



HARDWOOD FOREST IN THE PHILIPPINES. MANY TREES ARE OVER MATURE.

The natives are amazed to see a ponderous crane and steel hawser pick up half a dozen heavy logs and lift them onto logging trucks to be hauled by the trainload to the mills. This feat is a contrast to the old method, where it sometimes required half a hundred husky men and a dozen carabaos a week to do what steam and automatic machinery now does in a very few minutes.

The colorings of all Philippine hardwoods are rich and beautiful. They range from black and white to almost all the shades known elsewhere. Tindalo is claret-red and takes on a brilliant polish without the aid of chemicals; it is well adapted to carving. Other varieties are so hard that they will quickly dull the best of axes and comparatively little damage can be done to them by chopping. Rollers for sugar mills are made from certain logs, and in other instances cog wheels made of hardwood are better than wheels of steel or cast iron.

The Bureau of Forestry estimates that there are something like forty millions of acres of merchantable hardwoods in the islands, and the total wooded land greatly exceeds the hardwood lumber area. Of this vast acreage less than one per cent is in the hands of private owners; thus the insular government is the chief landlord. The estimated value of this enormous acreage, figured from present standpoint, is not less than $500,000,000. That sum is somewhat in excess of the amount we paid for the islands, even with the cost of conflict figured in. For centuries, at least ninety per cent of the timber has been going to waste through decay. The older trees have prevented the younger ones from growing as they should, and man has failed to market the matured product before rotting set in. It is the other way now in Philippine forestry management.

Philippine hardwood logs are so dense and heavy that they cannot be floated in booms to the mills. Therefore logging roads are of much advantage in working the forests. Logs cannot be towed as in this country unless each log is buoyed up by bamboo rafts. This condition applies to nearly all the several hundred tree species classified by the forestry experts at work in the Philippines.

Forestry areas are known that will average 40,000 board measure feet to the acre, and instances have been known where the measurement to the acre went over 200,000. Of all the fine woods molave and lauan are the most plentiful, with narra not far be-

hind. Narra is a fine cabinet wood and is adapted to fine furniture making.

The stumpage charges now exacted on government tracts in the Philippines are extremely reasonable. They range from seventy-five cents to three and a half dollars per thousand feet, while the mills receive very good prices for the lumber.

Large amounts of Philippine hardwoods are now finding their way into this country. In another decade they should be very popular for cabinet work and even in home construction, especially for the more costly residences. Mr. Cameron-Forbes, governor-general of the islands, is having an elaborate country home built in Massachusetts of Philippine hardwoods. This perhaps is the first structure to be put up in this country of material solely from the Philippine forests. All the leading Philippine lumber concerns have opened branch offices in all the principal Pacific coast ports, and where the natives once kept all their product for their own use it will not be long before it will find a ready sale throughout all the countries of the world. M. W.

Insect Enemies of Oak Trees

If the oaks were not a strong, vigorous, persistent class of trees the last one would have perished from the earth long ago. The tree is preyed upon by more than a thousand species of insects. Some of these are comparatively harmless, others are extremely destructive. They include all shapes, sizes, and characters, from the tiny four-winged gall flies, so small that they are revealed by the microscope alone, to the formidable carpenter moth larva which is sometimes three inches long and which starts a work of destruction that is apt to kill the tree, though years may be required to do it.

The thousand species of insects, with countless millions of individuals, have four favorite lines of attack upon the oak. Each species has a particular method of warfare. Some are in search of food, others are preparing places to deposit eggs. Every insect has a special object in view. One class confines its activities chiefly to the bark and to the soft layer of new wood immediately beneath; another to the twigs and smaller branches; a third to the wood of the trunk and the large limbs, including the wood of the roots; and the fourth class attacks the leaves and the small twigs. It is difficult to determine which class is most destructive, but all of them are extremely injurious, if the attacking insects are sufficiently numerous. The oak survives because it is hard to kill. It bears abundant crops of acorns, and the acorns sprout quickly, strike root deeply, and the seedlings are always much more numerous than the casual observer is apt to suppose. They are likely to remain small while in the shade of the parent tree, but they grow rapidly when the parent falls, and sunlight reaches them.

The user of oak wood is constantly encountering defects and injuries due to insect activity while the tree was growing. Some of these are worm holes which perforate the wood; some show in distorted grain, poor color, and the generally low-grade character of the material. The work of very small insects may stunt a large tree, and spoil its wood for many useful purposes.

The thunderbolt beetle *(Arhopalus fulminans)* may be taken as a representative of the numerous insects which attack the soft inner bark of trees. Although this creature had a formidable name, it is no worse in the harm it does than many others whose names are far less terrifying. In fact, no person who would judge the insect by its looks would think of giving it such a name, and it is not known why it was so named, unless, as some claim, it is because trees infested by swarms of these beetles wither as if scorched by lightning. The beetle itself is about the size, but not the shape, of a house fly. It has, of course, two thick and two thin wings, and six legs, as all beetles have, but its destructive work is done before it has grown any wings, and while in the larval stage. It then looks like a small grub. It hatches from an egg, works it way to the soft inner bark, and at once enters upon its destiny, which consists in doing all the injury possible to the tree that furnishes it a home and food. It not only consumes the juices, starches, sugars, and other substances which the tree must have to maintain its growth, but the destructive insect so runs its galleries that they cut off the flow of sap and cause it to dry up without doing any good either to the tree or to the insect. It is a wasteful vandal, a genuine pirate, destroying what it cannot use. It usually confines its operations to the soft inner bark, but occasionally it bores an inch or two into the sapwood, but seldom or never into the heartwood. Therefore, when users of oak find worm holes in the heartwood the blame should not be laid at the door of the thunderbolt beetle, as it probably belongs to another class which will be spoken of below. The thunderbolt beetle's damage is more "pathological"—that means, in this instance, that the character and quality of the wood deteriorate; it is poor in color, irregular in grain, and does not work well. These defects are due to the stunting of the tree's growth. It might be pretty hard for an inspector of oak products to tell just what the trouble is, except that the wood is "off class."

All blame for poor oak of that kind does not belong to the thunderbolt beetle. He has the help of scores of others which bore the bark, sting the twigs, gnaw the leaves, and puncture the roots; but he does his share of the damage.

The oak pruner *(Elaphidion villosum)* attacks a different part of the tree, but the damage it does affects the wood. The insect is a beetle about three-fourths of an inch long, and its attacks are confined to the twigs and small limbs. The insect lays its egg in a crevice or a puncture in the bark of a small twig. When the larva hatches it bores its way straight to the pith of the twig, and turning at right angles, begins to eat a passageway down the twig's center toward the tree's trunk. While it is doing this, it is in the form of a grub, and its appetite is like a wolf's. It eats practically all the time, and as it increases in size it makes a larger hole in the twig, and advances downward where the limb becomes larger.

Late in summer the larva attains its growth and prepares to change into a winged insect. It is then that it does its destructive work. It enlarges the end of the gallery until the limb is almost severed at that point. The bark and a few fibers of wood hold it. The larva then retreats a short distance up the gallery, plugs up the passage with bits of wood, enclosing itself in a snug chamber in the center of the limb, and ends its activity for that stage of its life. The next strong wind snaps the twig at the point where it was gnawed nearly asunder, and the branch falls to the ground with the grub securely corked up within it. Sometimes the ground under oak trees, and under other trees as well, is covered with branches thus broken off. They vary in size from a foot or more in length, and half an inch in diameter, up to six or eight feet in length and an inch or more in diameter. Each branch contains the larva which gnawed it off. After lying some months on the ground the beetle is hatched and escapes from the twig chamber where it had lain so long, and it flies away to deposit eggs on other trees, to start the life cycle over again. From the time of the deposit of the eggs on the twig till the full grown beetle emerges and flies away, is a period of about one year. The beetle is slender, and is grayish-brown in color.

The insect, in common with most forest pests, is hard to combat. The first visible evidence that a tree is infested comes when branches begin to fall. The damage has then been done, as far as that tree is concerned. The fallen branches may be gathered up and burned, with the insects in them, and that will help to save other trees, but this is seldom done, except in parks and private grounds, because the work is impracticable under ordinary forest conditions.

The wood of a tree so attacked is injured in much the same way as if defoliation by caterpillars had taken place, or as if the bark had been injured. Growth is stunted, and the quality of the wood is inferior.

The oak pruner should not be confounded with the sawfly, which is likewise a pruner. It severs limbs, after depositing eggs in them; but the work is differently done. The twig is gnawed off from the outside, not from within as when the oak pruner does it. The purpose of the two insects is probably the same. Each is providing a dead branch as a hatching place; but the sawfly cuts the branches off for the benefit of its offspring, while the oak pruner does it for its own benefit.

Another common and very numerous class of insects attacks living oak trees, and the injury is great in the aggregate. They infest other trees also, but they seem to single out oak in preference to all others. These are the insects which cause oak galls. It is scarcely proper to say that the insects make the galls, for the excresences grow; but there is no doubt that the insects cause them. The bark and twig borers described in preceding paragraphs are beetles, when fully matured, but the authors of the galls are of another kind. They never develop into beetles, though most of them pass through the intermediate larval stage, the same as beetles. Galls are the work of flies, creatures with four clear wings. This is not strictly true in all cases, for some galls are caused by other insects; but nearly all the galls which infest oaks are the work of gall flies. These constitute a very numerous family, more than 200 species being known. Sixty-three different species of these pernicious flies are known to work on oak. They cause the characteristic growths on leaves and twigs commonly called galls. These are known to all persons who are in the least acquainted with oak trees. Some oaks may be wholly free from them, while others are so overloaded that the branches appear deformed. A single oak has been known to have 20,000 galls on its twigs at one time.

Some people suppose that galls never appear on healthy oaks, but confine their attacks to stunted and diseased trees. There is danger of mistaking the cause for the effect in reaching this conclusion. The trees are stunted because the galls are present, and the galls are not there because the trees are in poor health. There is no evidence that gall flies go about searching for diseased trees on which to make their attacks, but they attack whatever they find that suits their purpose, and in course of time the trees most infested become the stunted specimens. The mistaken notion that galls occur only on poor trees, which are of little account anyway, is responsible for the totally inadequate estimate of the damage actually done by the pests. Were it not for the presence of the galls many of the trees, now regarded as stunted, would be valuable. Their vitality has been sapped in supplying material to produce the excrescences, and good, healthy wood cannot be built up.

Gall flies belong to what is known as the hymenoptera order of insects—the order to which wasps and ants belong. They are in the cynips family, and are usually very small. The largest number in the family of 200 species is not much bigger than a robust buffalo gnat, and the smallest is hardly visible to the naked eye, but when they make a systematic onslaught upon the most vigorous oak they can undermine its strength, and ultimately ruin the tree.

Some attack the leaf, others the leaf steam, and some single out the tender and succulent twigs as places for assault. The first step in the operation is to thrust the sting into the tender bark of the twig or leaf, and (according to some authorities) place a drop of poison in the bottom of the wound, where the egg is also deposited. The egg hatches in two or three weeks and becomes a tiny grub. Already the irritation at the bottom of the wound, due to the poison or possibly to the presence of the egg, has upset the healthy functions of the tissues at that point, and the sap accumulates there, forming a liquid bath in which the grub floats, and from which it obtains its food. The gall has begun to grow. The tree is trying to heal the wound, and the swelling, which ultimately becomes the gall, is the result.

If the gall is on the leaf or the leaf stem it ends when the leaf falls in autumn, and the grub in its center hatches into a fly and the fly gnaws its way out and wings its flight. It may not come out as soon as the leaf falls, but may use the gall as a shelter for months before leaving it. The gall on a twig does not need to complete its work in one season, though it usually does. It may hang for years, but after the first season it is usually dead and dry, and often the twig is dead, too, because the sap which should have nourished it was consumed in making the gall and in feeding the insect within.

A gall may have a single inhabitant, or it may have a score of the same kind. It depends on the species. One kind of fly may lay a single egg at a point; and a fly of a different species may plant them in clutches liks eggs in a hen's nest; and the resulting gall will enclose a single grub or a brood of them. It is not unusual for insects to occupy galls which they had no part in making. They are simply intruders. The gall provides a good shelter and they crawl in and make themselves at home. For that reason, the finding of insects in a gall is no proof that they had anything to do with making it. In one instance, a single oak gall contained a mixed congregation of forty-one individuals, five different species, consisting of one fly, one beetle, five moths, two cynips, and one neuropteron.

The practical question from the wood-user's standpoint is not the number of insects that make or occupy galls, but the effect on the trees. In the aggregate, this damage is great, but there is no means of measuring just how great it is.

There is another group of insect enemies of the oak. They are the borers which penetrate the trunk while it stands in the forest. The injury from that cause is well known, because the work is apparent wherever it exists. It is not like the indirect damage due to bark borers, twig pruners, and gall flies, the work of which cannot always be seen.

Insects which tunnel into the living wood are many, but one well-known species may be taken as a representative of all. It is the larva of the carpenter moth (*Prionoxystus robinæ*), sometimes known as the locust borer, though it is not the insect which for some years has been devouring locust trees in many parts of this country. It is not a beetle, but is a moth; and in the Middle West it is most frequently seen flitting about electric street lamps. The largest specimens of the moth have a spread of wings from two to three inches. The moth itself is a characterless creature. It eats nothing from the day it emerges from its cocoon until it dies of starvation at the end of a mischievous career. The mischief which it does consists in providing for the next generation, and the "next generation" do much of their bad work before they turn into a moth.

The moth lays 200 or 300 eggs in crevices in the bark of oak and other trees. The eggs hatch and small caterpillars result. It is the habit of most caterpillars to strike for the leaves of trees, but this one turns its gimlet-like mouth inward and begins to bore straight for the tree's heart. It has been described as timber's "most cruel and formidable" enemy in the insect world. A noted entomologist declared that if one of these caterpillars finds lodgment in the trunk of an oak, the tree is doomed. That is putting it pretty strongly. Of course, the tree will die some time, but many a tree survives long periods of years until it ultimately dies, apparently, from other causes. Doubtless the majority of trees so attacked recover, and live out their allotted years; but it is equally certain that the trunks of many are ruined. This is particularly true in the South, though the carpenter moth prosecutes its work from Maine to California.

The caterpillar is small when it begins to gnaw into the wood, and it makes a small hole. The worm grows as it penetrates the wood, and it seems to know that it will want to come out some time, and it goes back and forth at intervals, gnawing the hole larger, so that when it wants to come out it can do so. The caterpillar attains full size about the third year, when it may be three inches long. Its tunnels through the wood are as large as half-inch auger holes, and extend from the outside to the heart of the tree. The creature spends about three years at its destructive work, and apparently works all the time, except when the weather is too cold. It ruins the inside of the tree, not only by the holes it makes in the wood, but indirectly by decay. Water runs in the holes, causing rot to set in. The worm has no use for rotten wood, and it always picks out parts where decay has not yet appeared. The holes are often lined with a smooth, plaster-like substance, and this helps the lumberman to identify the work of this caterpillar.

At the end of three years the caterpillar's race is run. It is then

an ugly, red brute, covered over with scattering hairs. It crawls to the opening of its tunnel, fastens itself to the tree's bark, and there the change from a caterpillar to a moth takes place.

In view of the fact that the moth deposits several hundred eggs in crevices of the bark of suitable trees, the wonder is that the pest does not become so numerous as to destroy the forests. There are counteracting agencies at work. It is believed that woodpeckers and other birds hold the moths within limits by eating the eggs. Birds have been observed picking them from the crevices in bark, and it is believed they get most of them.



Buying Furniture Lumber



Lumber is the most important of the raw materials entering into the manufacture of furniture. When the purchasing department of a furniture factory tackles the item of lumber there is an entirely different proposition involved from that of the purchase of other materials. Lumber can not be analyzed and tested chemically as can glue, varnishes, oils, and then with a certain fixed standard of samples bids be invited and purchases made accordingly from the lowest bidder under these specifications. It is physical analyses rather than chemical analyses that enter more into the grading and specifications of lumber, and it is because of this fact that the purchasing agent of the furniture factory may get stung when he thinks he is getting a bargain by buying lumber at the lowest price offered within certain grades or specifications.

The bargain habit has just as strong a grip on the purchasing department of a furniture factory as it has on any one else, and even the furniture houses themselves who decry price cutting and bargain buying seek for bargains just as diligently through their purchasing department as they talk against them through their sales department. They get left, too, just about as often as the retail merchant who goes out in the furniture world to buy bargains in furniture. They get left because their desire to save a dollar in first cost often blinds them to other advantages that might be worth more than the dollar. There are bargains to be had in lumber now and then and the furniture men get some of them. When they do, however, it is the result of luck or accident or because the lumber buyer knows his business so thoroughly that he actually knows a bargain when he sees it.

For a purchasing agent to send out a large number of inquiries for lumber of specific grade and thickness to various mills and wholesalers, then sort these out and accept the lowest quotations in the lot, is really no way to get a bargain. The low bidder may not be equipped to make deliveries and the inconvenience from this may easily amount to more than the gain in price as compared with quotations of some lumberman who has the facilities and can make deliveries on time.

This is only one feature of the matter. Another is that the purchasing agent who is not thoroughly familiar with lumber may get caught, because of the fact that lumber from different mills may vary considerably, even within the same specifications as to grade. It is a fact that lumber may vary from one to five dollars in value inside of a given grade, because of the variations between grades. Another factor is the nature of the defects in any of the lower grades of lumber. They may seriously affect its cutting into the particular forms wanted. Standard defects of various kinds appear in lumber in various forms and locations, and the lumber from one mill or one locality may differ considerably from that of another in the nature and distribution of the defects.

Let us suppose, for example, one is buying No. 2 common in plain oak. Here we have a product that may vary in texture, color, defects, and in many other ways and still pass muster in this grade. It may even be bought under one of the recognized grading rules, inspected by an authorized inspector, and the inspection certified, and yet there will be quite a difference in the value of the lumber when it comes to working it up into a particular kind of furniture.

It follows that instead of putting in a lot of time compiling lists of lumbermen, getting quotations, and studying the market, the lumber purchaser for the furniture factory should make a study of lumber as it is used in his cutting department. He should know what sizes most of it is worked into, and what form of defects causes most trouble and loss. If he will study this carefully, he will find there are more important things for consideration than finding the mill or the dealer that will promise to furnish lumber of a given grade at a dollar or two lower price than the general market quotations. He will realize that the most important thing is to find a source of supply that can be depended on for the kind of lumber that works best into his stock.

The best way to find a bargain in furniture is not to hunt it directly through the price list, but to seek it by way of finding the lumber that fits the needs best. Several well-known and dependable concerns may quote the same price on a given grade and kind. The chance for a bargain here is not through efforts to beat one down in price by playing one against the other, but it is through making a study of their product to see which will work up best. If you can find one of these that will give you from one to five dollars more material per thousand, that is the material to buy and the effect will be the same as if you actually reduced the purchase price that amount.

The really shrewd buyer of broad parts is not given to playing one quotation against another so much as he is given to matching his knowledge of values and of material against the possible ignorance of some one offering to supply it. There are millmen ignorant of the actual value of their lumber. It is so well known that it has been complained of time and time again at lumber conventions. Usually it is the small millman who is made the goat in this matter and is blamed for selling his lumber at less than its actual value. This is the man whom the shrewd furniture factory buyer may single out now and then as his victim. It is a scheme that can be worked, too, provided the furniture buyer is well posted in lumber and not only sets forth his specifications but sends a competent inspector to the mill so that he knows positively that he is going to get what he wants. The buyers of wagon and implement stock have often followed this plan and found it to work very nicely. The only time it works, though, and the only way it may be worked successfully is when the buyer really knows his business and when the institution is equipped with inspectors to send out and take up the stock at the mills.

To buy lumber of a given grade from smaller mills because the smaller millman may not know the full value of his stock is no certain way to get a bargain unless there is both inspection and a certain amount of supervision over the manufacturing. The timber may be of the kind and quality desired but the manufacturing may be so poorly done as seriously to impair the value of the stock. If a saw cuts rough it makes heavy dressing to get a smooth surface, and this may reduce the thickness too much. If the saw does not stand up to its work well and runs snaky, there will be thin and thick places in the lumber which impair its value. There are many imperfections of manufacture, found in the output of those millmen who are ignorant of the real values of lumber, that often amount to more than is gained in the way of bargain prices through purchasing from them.

Let us turn aside for a moment to a different phase of this lumber buying business, by taking up the matter of the varying grades and their relative values to the furniture man. Grades in lumber like grades in glue, varnish, iron, coal and other things, naturally result in different prices or values and these in turn fluctuate from time to time in their relation to each other, yet in the long run they are fairly even.

Coal people, for example, figure heat unit values of different grades and kinds of coal, and from this and other factors entering they make the selling price, so that it matters but little what grade one buys—the ultimate cost is practically the same to secure a given amount of heat.

It is partly that way in the lumber business. The upper grades carry higher prices, but in cutting up they produce more good stock, so when price, freight, handling and all other things are considered, there is not as much difference between the ultimate cost of the upper grades worked into furniture and the lower grades.

There is a disposition to turn to lower grades when the price of lumber runs high. A striking example of this occurred during the past year. Because of higher prices in the lumber market the demand for grades below No. 1 common became so strong that low-grade lumber was the scarcest item on the market, in face of the fact that a greater percentage of low-grade stock is made now than ever before.

The question that comes out of all this is, how can a lumber buyer know when it is cheaper to buy low grades or upper grades or what particular grade would be the best bargain in lumber at a given time? The only way he can know positively is by keeping a careful record of the results of cutting and using lumber of different grades. From time to time take a car of this grade, cut it up and keep a record of results, then a car of another grade and so on through the list of grades. From comparing results one should be able to establish a relation of values between grades that will prove fairly reliable. It is a simple proposition to compare it with the current quotations at the time of purchase and determine what grade would be the best bargain.

Conditions Around Memphis

There has been a decided improvement in weather conditions throughout this territory during the past fortnight. The rainfall has been rather lighter than heretofore and there has been practically no rain now for a week. The woods are still wet and there is still interference with logging operations in some of the lowlands. Taken as a whole, however, logging can be conducted on a more satisfactory scale now than for some time and good progress is being made. The loading of logs is taking place rapidly and the timber is being brought to Memphis in large volume. Deliveries are also being made to mills at points outside of this city. It is estimated that there are between 700 and 900 cars of logs at Memphis proper and lumber manufacturers, taking the advice of traffic officials of the various lines entering this city, are doing everything they can to get all of their logs in before the car shortage begins to make itself more strongly felt.

There are some complaints of car shortage already, but not so serious a situation has developed as was anticipated. The principal cause for this is to be found in the fact that the recent heavy rains retarded picking and ginning of cotton and therefore prevented the heavy rush of the staple to market. The movement to Memphis is now increasing rapidly and, with favorable weather for picking, ginning and marketing, the climax of the movement to this centre ought to be witnessed within the next six or seven weeks. The railroads say that they have the situation well in hand, that they have plenty of cars and plenty of motive power and they believe that, while there is practically certain to be some congestion, there will not be the delay in the handling of traffic witnessed during the fall season in some other years.

Manufacturing operations continue on a rather large scale. A number of the big mills here are running on double time and the same is true of a number of the larger plants in the territory directly tributary to this city, with particular reference to those in eastern Arkansas. As a general rule, the latter have a good supply of timber and forces for logging are being increased in order that there may be no necessity for shutting down for lack of raw material. The demand for hardwood lumber is broadening and both manufacturers and wholesale dealers are doing all they can in the direction of getting their stock lists in such shape that they may be able to take prompt care of the orders now being received and of the business that is promised through the rapidly increasing inquiries for practically all items.

The Southern Hardwood Traffic Bureau will reopen the controversy over rates on hardwood lumber shipments from Memphis to New Orleans. This was decided at a meeting of the board of managers held here a few days ago. The general manager, J. H. Townshend, was instructed to engage John R. Walker, attorney at Washington, to file a petition with the Interstate Commerce Commission covering this subject. The bureau wants a rate of eleven cents on hardwood lumber shipments from points south of Memphis and north of the main line of the Southern Railway in Mississippi to New Orleans and a rate of ten cents from points between the Southern Railway and the Mississippi state line to the Crescent City. Cottonwood and gum already enjoy the lower rates, as they were exempted from the advance which was recently granted by the commission. It is therefore sought by the bureau to put all the other items on the hardwood list on the same basis as cottonwood and gum on the ground that the rates granted by the commission are excessive. The bureau has been threatening for some time to reopen this controversy and no surprise has been occasioned by the instructions given Mr. Townshend by the board of managers. This action was taken immediately after the return of George D. Burgess, chairman of the bureau, from Europe.

East Indian Mahogany

The East Indian mahogany is a large tree that is very closely allied to the true mahogany of tropical America. It is known to botanists under the name of *Soymida febrifuga*, and at one time was considered to belong to the genus *Swietenia*, of which the true mahogany (*S. mahagoni*) is now the sole representative. In the trade the wood is usually known as East Indian mahogany, but it is also called Coromandel redwood or bastard cedar. In its native country the tree is known as the rohun tree, because it furnishes a febrifugal bark, which has been sold by drug supply houses under the name of "rohun." This bark has an astringent bitter taste, and is considered a good tonic in intermittent fevers. The bark of true mahogany possesses similar virtues and has been employed in the West Indies as a substitute for cinchona.

The East India mahogany is a native of the East Indies, chiefly of the central and southern provinces. It is especially abundant and attains its best development in the mountainous districts, where a full grown tree in good locations frequently is found seventy-five feet in height and from two to three feet in diameter. The majority of the logs are considerably smaller and usually average from sixteen to twenty feet in length and from one to one and one-half feet in diameter. The wood is hard, strong, heavy (about seventy-two pounds per cubic foot), more or less close and straight-grained and of a dark blood-red color. It is not as difficult to work as its weight and hardness would lead one to believe. It is said to be exceedingly durable and lasts indefinitely under ground, but it is not adapted to conditions where it is exposed to the sun and weather. It often splits and checks badly when exposed and after it is thoroughly seasoned becomes extremely brittle. In conditions where the wood is not subjected to the hot rays of the sun, it rivals the finest English oak in strength and can be used successfully for structural purposes. The wood is well suited for indoor work and for furniture and cabinet making. It is used also in boat building, well-work, farming implements, and for turnery and carved work in temples and fine residences. The dark-red color of this wood is apt to fade if it is exposed to the direct rays of the sun. In this respect the East Indian mahogany differs from the true mahogany, which turns darker and more beautiful with age. No figures are available as to the amount of this wood imported into this country. It is often mixed with the darker grades of padouk, which is the product of several entirely different species of trees.

L. L. D.

Making Stumpage More Valuable

Editor's Note

This article is based very largely upon two addresses recently delivered before the Society of American Foresters by Howard F. Weiss, director of Forest Products Laboratory at Madison, Wis., and Royal S. Kellogg, secretary of the Northern Hemlock and Hardwood Manufacturers' Association.

One of the live questions before the lumberman today is the reduction of waste in all his operations. It is a question of the efficiency with which our forests are now utilized and the possibility of increasing this efficiency. The lumber industry cannot expect to be maintained in a permanent flourishing condition unless waste in operation is eliminated. The problem is quite similar to that which faced the meat-packing industry, the petroleum industry and others, and while not easy of solution, nevertheless will be solved.

It has been as owners of stumpage and beneficiaries of rising stumpage prices, rather than as manufacturers and sellers of lumber, that timber owners have made money. Only during periods of quick rise in lumber values do lumbermen make any considerable profit purely out of their manufacturing operations. Stumpage prices respond quickly to rise in lumber values and it is almost axiomatic that the price of stumpage never goes down. For instance, just prior to the depression in 1907 lumber prices had reached their maximum. During the next four years the prices of the most important kinds of lumber averaged from three to six dollars below the previous level. During all this period, however, stumpage prices either remained stationary or in some instances actually increased.



STUMP OF TULIP TREE CUT 4' HIGH WITH AXE, and LOG BUTTED BY CUTTING OFF 2' PIECE SEEN IN FOREGROUND, PINNACLE CREEK, WEST VIRGINIA.

In the words of R. S. Kellogg, "There are only two ways for the owner to make money out of his timber, and, like the rest of us, he would not have bought timber in the first place had he not expected to make money out of it. The first method is to hold his timber for a rise in stumpage prices and sell it when he is satisfied with the increment. This is judicious investment, the same as one buys favorably located farm land, city lots, or other property that in all human probability will rise in value. The second method which the timber owner has of making money is to log and saw and market the products, the net balance at the end of the operation being the price he realizes for his stumpage. This necessitates that the timber owner becomes proficient in the manufacturing and merchandising of a great commodity.

"The increase in the use of substitutes for wood, of which lumber prices are one contributing cause, together with the natural limitation of the lumber output, will bring about a decrease in per capita lumber consumption. Present uses for wood and many uses which will be developed will, however, cause an increase in the total demand, which will be reflected in higher price levels for lumber. The increase will probably be least in the lowest grades and in structural timbers, for here substitutes compete most strongly, while the increase in prices will be greatest in the upper grades of woods which supply fine finishing material and other products for which no really satisfactory substitute is likely to come into general use. Moreover, the lumber production of the future will contain a larger percentage of low grades than at present, due to increased cutting of smaller and more inferior timber, unless other methods of utilization for timber of this character are developed."

What are the lines for improvement in forest utilization? Howard F. Weiss points out three, namely, (1) utilization of waste material resulting from manufacture; (2) improvement in sawing logs; (3) the conversion of timber into the use for which its intrinsic properties best fit it. He divides trees into three classes, namely, (1) resinous conifers like the southern pines; (2) non-resinous conifers like white pine, spruce and hemlock; (3) hardwoods. For the first two classes the following operations are possible: The stump, top, slab, and edgings and trimmings can be hogged, shredded and mixed with the sawdust and shavings for conversion into ethyl alcohol, collecting turpentine (from resinous woods) and some acetic acid as by-products. After conversion about sixty-five to seventy per cent of the material will still be available for fuel. The Du Pont Powder Company has now in operation a plant for manufacturing ethyl alcohol from mill waste, and what formerly found its way to the refuse burner is now converted into refined "grain" alcohol at the rate of a thousand gallons a day. The Fullerton Lumber Company is erecting a similar plant at a cost of three-quarters of a million that will have a capacity of five thousand gallons of alcohol daily.

A modification of the above plan is to make the slabs, edgings and trimmings into pulp, while the rest of the waste goes into the alcohol plant. Some progressive lumbermen in eastern Texas were not satisfied with the old method of the refuse burner and erected a pulp and paper mill to utilize them. Today they are underselling their competitors in the Minneapolis paper market.

Hardwoods afford a different proposition, as they are for the most part ill-suited for paper making and contain no volatile oils or resins. The waste can, however, be profitably utilized for the manufacture of ethyl alcohol, though practically nothing has been done along this line. A process that has every indication of going far to solve this problem is now being perfected by the Chicago Wood Reduction Company. In brief, their plan consists of briquetting dry sawdust or hogged material and carbonizing these briquettes in a retort so arranged that each block is in intimate contact with a heat radiating surface, and the entire action is under entire control of the operator. It is claimed that the yield of products so made is in all cases fully equal to that of older methods, while the yield of acetic acid is nearly or quite doubled. A commercial plant is being constructed in Arkansas in connection with a large cooperage concern.

Mr. Weiss cites the following illustration of the operations now possible for the utilization of hardwood waste from a yellow birch tree 16 inches in diameter and containing 35 cubic feet:

"Operation 1. Suppose the usable top, limbs, slabs, edgings and trimmings, comprising about 22 per cent of the tree volume, are destructively distilled. They will yield 14 pounds of acetate of lime, worth 35 cents, 0.7 gallon of methyl (wood) alcohol, worth 20 cents, and 3.6 bushels of charcoal, worth 22 cents. According to the usual practice, the tree would simply be cut into lumber yield-

ing 168 feet board measure, worth about $3 ($18.00 per 1,000). By the addition of the operations suggested this would be raised to $3.77, or a gross increase of 26 per cent.

"Operation 2. If, in addition to the above, the dust and shavings were converted in ethyl (grain) alcohol, they would yield about 1.5 gallons, worth 67 cents. The gross value of the by-products would then be $1.44, raising the total gross value of the tree to $4.44, or an increase of 48 per cent. In addition to the ethyl alcohol, appreciative quantities of acetic acid could be collected, but, to be conservative, this was not figured in the example."

It is the experience of every operator that if attempt is made



WASTE COOPERAGE STOCK, NEW YORK.

to utilize the timber too closely in the ordinary way a point is reached where closer sawing means an actual loss. It is generally the No. 3 lumber that is the lumberman's greatest source of trouble in marketing his products. This low end of the product averages close to one-third of the entire lumber product the country over. The following table prepared by Mr. Kellogg shows approximately the percentage of different grades obtained from the ordinary run of logs of the four most typical northern hardwoods—basswood, birch, elm and maple.

	1st & 2ds	No. 1	No. 2	No. 3
Basswood	25	25	23	27
Birch	23	25	23	29
Elm	19	24	24	33
Maple	16	25	25	34

The big question, then, is what to do with the material in the last column. It is obvious that the closer the utilization in the woods, the greater the number of small and knotty logs and consequently the larger the percentage of No. 3. What, then, should be done with these small logs? Mr. Weiss suggests two courses: If they come from small trees let these trees grow. If they come from top logs manufacture them into products that will yield a profit. It may be only a hewn tie, or it may be pulp or alcohol, or novelties, but whatever it is, let it be something that will yield a profit and not eat into the profits. An example may be cited in the case of the Goodman Lumber Company, which realized that it was losing money by trying to convert its small hardwood logs and tops into lumber, and is now erecting a destructive distillation plant to bring this material to the mill where it will be manufactured at a profit and not at a loss.

Each mill has its own particular problem and what will prove successful for one may not for another. For instance, according to Mr. Kellogg, two strictly modern mills of some 100,000 feet 10-hour capacity are situated about one hundred miles apart. One is in a city where the demand for fuel is good. Last year this mill made a profit of $28,000 on its slabs, edgings and trimmings. The other mill is in the woods with only the families of its employes to supply with fuel. The wood account of this mill showed a loss last year, so the owners of it have joined forces with a chemical company and an iron furnace and have erected a hardwood distillation plant. The contracts for the products indicate a profit sufficient to pay five per cent upon the sawmill investment.

Whatever step is to be taken should not be taken blindly. One of the first things to do is to install a system of cost keeping that will show the value of the products cut from logs of various kinds and sizes. It is then possible to determine the minimum limits of profit and with this as a basis make arrangements to convert what are now losses into profits. One reason why such action has not been more imperative in the past is that the rise in stumpage values of timber purchased at a low price has afforded the lumberman a false or unearned profit and concealed the true nature of affairs. Mr. Kellogg mentions an instance of a firm in the upper peninsula of Michigan that received a net price of $8.65 for its No. 3 ash, $8.42 for No. 3 elm, $6.55 for No. 3 hard maple, $7.75 for No. 3 soft maple and $7.86 for No. 3 birch—all produced at a cost of $12 per thousand, which meant an actual loss of several dollars a thousand. Under such conditions this firm could not be censured for wanting to leave as much as possible of its No. 3 material in the woods. In fact, this condition has led more than one lumberman to give orders that no logs be brought to the mill unless there was reasonable certainty that they would stand the cost of the operation.

The encroachment of substitutes for wood is the result of economic changes that cannot be halted. Combating them through advertising or in any other way will avail nothing, according to Mr. Weiss. These economic changes may be summarized in two words—better construction. "About fifty per cent of all lumber is consumed by the building trades, where it comes in direct competition with clay products, cement and steel. With the development of the country and the construction of more permanent buildings the role of lumber in such construction is bound to play a diminishing part. Already the differential in cost between build-



SOUND TOPS OVER 8" IN DIAMETER LEFT IN THE WOODS TO DECAY, BUTLER COUNTY, MISSOURI.

ings of wood and those constructed of other materials is, in many localities, inappreciable. Furthermore, the tendency is for many of the so-called substitutes to decrease rather than increase in cost. Take cement, for example: Its cost has gradually dropped from $2.15 per barrel in 1883 to $0.81 per barrel in 1909. How can lumber permanently rise in value in the face of such competition? Obviously, new uses must be found; new channels of exploitation must be developed. What is true of buildings is also true of other forms of industrial development. Note the almost complete annihilation of the wooden coal car; the rapid introduction of the steel

passenger car; the increasing use of steel and concrete poles and posts; the gradual elimination of wood in vehicles; the concrete silo; and kindred other commodities where wood once held complete sway. Of course, the counter-argument is that although the use of substitutes is increasing, so is the country, and the demand for wood will remain strong enough for it to maintain at least its present status. Were I a lumberman I should prefer not to be blinded by such optimism. The demand for high-grade lumber will probably always be with us, as is indicated by the character of our lumber exports; so the by-products plant, which is primarily adapted for waste and low-grade material, will not annihilate the sawmill, but simply supplement it.''

There is another phase of the situation that must be considered by the lumberman who contemplates the construction of a plant to utilize his by-products, and that is that there must be a sufficient amount of material with which to work and this material must be available for the future as well as the present. It is entirely possible for a company to erect a sawmill for a ten years' cut and then dismantle the plant. The by-product industries mentioned above are too costly for temporary operation. It is largely because of this fact that a greater number of forest-products plants are not in operation, and if the number of such plants is to increase, there must be an assured supply of raw material for years to come. That this will eventually be the case no one familiar with conditions in well-managed forests abroad can deny. In Germany, for instance, the sawmills and associated products plants are permanent structures with a perpetual supply of timber. When the time comes here that the lumberman considers his forest as a definite and permanent part of his plant to be maintained as such, the objection just cited will cease to exist.

''We will admit,'' says Mr. Weiss, ''that enormous wastes are taking place, but these wastes can never be utilized until the thousands of scattered holdings are combined into efficient working units and hundreds of inefficient sawmills now operating and furnishing lumber to the open market are exterminated. * * * I do not advocate and am by no means in favor of depriving these little backwoods sawyers of a living. They have as much right to live as any of us; but what I do believe is that in general their operations should cease with the conversion of the standing tree into logs and delivery at a marketable point. There is no more reason why such little operators should send lumber to the general market than there is for farmers to send dead pigs to Chicago. On the other hand, there is just as good a reason why these little fellows should make lumber for their home consumption as there is for the farmer to kill his pigs for home consumption. I realize the monopolistic danger of the scheme advocated, but monopoly can and will be overcome. There is a sharp distinction between efficient operation and monopoly. If our forests are to be efficiently used and not ruthlessly destroyed, we must have them combined into sufficiently large working units, so that conservative utilization is practical. To do this the actual purchase and ownership of the land by large holding companies may not always be necessary. But the increased efficiency of utilization would make it impracticable for the destructive and inefficient mills, whether large or small, to operate, because they could not compete with the efficient mills, and would consequently be undersold. Not until this is accomplished can forest utilization ever approach the efficiency with which other big resources are now used.''

There is no reason to suppose that it will not be done ultimately, but it will take time.

The Export of Round Logs

Round logs of numerous sizes, various kinds, and for many destinations leave the United States yearly. Until a year or two ago the customs house records kept few details as to kinds of wood, and even now little information as to sizes is obtainable. The article is called a log whether it is the little dogwood billet, with the bark on, that is bound for a shuttle factory in Scotland, or a pine tree a hundred feet long ''to be the mast of some great ammiral.'' There are all kinds and sizes between. Formerly there was only one class in export statistics, and that class was simply ''logs,'' except that round logs were never mixed with hewed timbers. At the present time there are four kinds of round logs recognized, hickory, oak, walnut, and ''all other.'' Occasionally the ''all other'' class is subdivided in certain reports. It is very much larger than the three other classes combined. The export of hickory logs during the year 1912 is shown in the following table, and also the value as given in the invoice at the point of shipment. Comparison with former years cannot be shown because separate statistics were not kept prior to 1912.

HICKORY LOG EXPORTS IN 1912.

Country—	Feet B. M.	Value
Belgium	218,000	$ 8,260
France	668,000	24,665
Germany	998,000	32,356
Netherlands	870,000	30,794
Norway	9,000	240
England	4,370,000	144,867
Scotland	638,000	20,014
Ireland	188,000	6,933
Canada	69,000	2,917
Panama	1,000	20
Uruguay	3,000	200
New Zealand	2,000	237
Portuguese Africa	3,000	219
Total	7,974,000	$271,722

The foregoing table shows no exports to South Africa, yet a recent consular report from that country speaks of the presence of the wood there, imported at a value of sixty-nine cents a cubic foot, without the added freight. It may, however, be some form of the wood other than round logs, as the reports are not explicit on that subject. Consul E. A. Wakefield, at Port Elizabeth, who made the report, made a statement which American dealers in hickory ought to carefully consider. ''Australian hickory is cheaper than the American product,'' says he. ''The invoice prices average about sixty-two cents per cubic foot, while the American is invoiced around sixty-nine cents.'' Every American lumberman knows that no hickory grows in Australia. The crowfoot elm of that country is palmed off as hickory where the trick can be turned, but it is a long way from hickory. Apparently an American consul, whose business in the foreign country is to look after this country's interests in trade, has been deceived as to the ''Australian hickory,'' and he seems to think that it is the same thing as the hickory from this country, except cheaper. Evidently the fact has not yet been widely-enough published that hickory grows nowhere except in America. Those who claim to sell this wood from another country are palming off something as a substitute.

Consul Samuel H. Shank, stationed at Fiume, Austria, reports that dealers in that part of the country are willing to handle hickory but are unable to get it except by the round-about way of Germany, which causes much delay and expense. Exporters of hickory might bear that statement in mind and see if the people who want to buy the wood cannot be accommodated.

The export of logs is only a part of the hickory that goes to foreign countries. Much crosses the sea in a manufactured or partly manufactured condition, as vehicle stock, handles, and articles of various kinds.

The average invoice value of round black walnut logs exported to foreign countries is about $66 a thousand feet, log measure, which is supposed to be approximately the same as board measure. More walnut goes to foreign markets than is used at home, but the

round log shipments are only part. The whole quantity of walnut sent abroad annually is not definitely known, because in some instances the different woods are not listed separately. The export of round walnut logs amounted to 9,816,000 feet in 1912, valued at $612,067. Except 2,000 feet which went to Canada, the whole export was taken by the various European countries. Germany buys much more of this wood in the round than all other countries combined. Some of that which enters Germany is reshipped to other markets. Bremen is an important port of entry for this wood, and some of it finds its way to Russia, Austria, the Balkan states and Turkey, while occasionally small amounts find their way into western Asia. American walnut is for sale in Jerusalem.

The accompanying table tells where the round walnut logs go. An examination of values shows great variation. The average of all is moderate, but some markets pay much more than others. The small quantity that went to Austria-Hungary was valued at $272 a thousand, that to Portugal $133, while walnut in Denmark cost less than fifty dollars. Unusually high prices are doubtless due to extra fine grades of wood.

ROUND WALNUT LOGS EXPORTED IN 1912.

Country	Feet B. M.	Value
Austria-Hungary	4,000	$ 1,087
Belgium	794,000	56,390
Denmark	19,000	940
France	77,000	4,650
Germany	7,759,000	477,311
Netherlands	140,000	11,009
Portugal	9,000	1,200
England	964,000	55,729
Scotland	41,000	2,835
Ireland	10,000	800
Total	9,816,000	$612,067

Most of the logs are manufactured into veneer when they reach foreign factories. The wood is used for furniture, electrical apparatus, gun stocks, and small wares and novelties of many kinds. Walnut has not gone out of fashion on the other side of the sea as it has on this side.

Round oak logs go to foreign markets in smaller amounts than walnut, and with oak as with walnut, Germany is the largest buyer. England is second, and Scotland third. The average invoice value is slightly under $40. Small quantities of the oak go to Canada and Newfoundland, and Europe takes all the rest. No distinction is made in statistics between the different kinds of oak. The table which follows gives the shipments to different countries.

ROUND OAK LOGS EXPORTED IN 1912.

Country	Feet B. M.	Value
Austria-Hungary	29,000	$ 1,094
Belgium	100,000	3,700
Germany	2,958,000	118,027
Netherlands	505,000	22,216
England	1,047,000	41,587
Scotland	273,000	9,377
Ireland	6,000	247
Canada	31,000	909
Newfoundland	4,000	175

A large number of oak logs are exported which are not included in the foregoing table. They are of a lower class and are intended for piling, props, and other similar purposes. They are included in the table of miscellaneous round logs listed as "all others."

Formerly sound logs were scarcely ever separated into classes, but all went to foreign markets without distinction, as far as statistics were concerned; but lately certain species are separated from others, such as hickory, walnut and oak. All the rest are grouped under the head "all other." This is by far the largest class. The total exports in a year are nearly ten times as large as of the specially listed logs; but the average value is much less per thousand feet. It is slightly under $19. This is proof that the export logs are not of high class. They are intended for various purposes. The table which follows gives the quantity, value and destination by countries:

MISCELLANEOUS ROUND LOGS EXPORTED IN 1912.

Country—	Feet B. M.	Value
Austria-Hungary	10,000	$ 256
Belgium	2,225,000	50,832
Denmark	58,000	1,750
France	4,225,000	150,756
Germany	16,914,000	560,958
Italy	1,140,000	34,330
Netherlands	9,367,000	311,866
Norway	145,000	4,570
Russia	22,000	660
Spain	246,000	13,885
England	9,885,000	328,749
Scotland	1,365,000	36,656
Ireland	89,000	3,647
British Honduras	13,000	400
Canada	55,973,000	610,603
Costa Rica	310,000	6,716
Guatemala	30,000	653
Honduras	290,000	6,124
Nicaragua	1,000	25
Panama	6,198,000	161,179
Mexico	16,024	154,681
Newfoundland	1,000	80
Jamaica	15,000	203
Trinidad	9,000	456
Cuba	1,501,000	28,551
Danish West Indies	6,000	180
Haiti	19,000	756
Argentine	3,000	228
Peru	122,000	1,120
Venezuela	46,000	1,700
China	9,000	103
Hongkong	4,194,000	41,600
Japan	2,158,000	16,504
Philippines	4,402,000	31,287
Portugese Africa	3,000	151
Total	136,000,000	$2,574,312

Practically all the commercial woods of the United States are represented in the foregoing table of miscellaneous round logs exported. They are put to so many purposes that woods of all kinds can find uses. A fairly large proportion is yellow poplar, and logs of this wood are generally of good class and are used for manufacturing purposes in the foreign countries where they go. Much pine of various species is exported in the log, some white and Norway pine from the North, yellow pine from the South, and different species of spruce and fir are included from both the East and the West. Shapely sticks of sufficient length make masts; hardwoods, and occasionally softwoods also, are intended for piles, posts and timbers in quays and piers; and in some instances, though such is not the usual custom, round logs are made into crossties for railroads in foreign countries.

A rather large number of mahogany logs are included. They are first brought into the United States, and then forwarded to foreign markets. Some cedar logs are exported. When such are listed, it is not always easy to tell what the species is. Some Spanish cedar is brought into this country and is afterwards exported. Red cedar pencil wood occasionally crosses the sea in log form. The northern and southern white cedars are shipped for poles and other purposes, and some of the western red cedars, and perhaps other Pacific coast cedars, are exported also.

Ash logs are important in the export business, and some cottonwood, birch, maple and gum go to foreign ports, and minor species are frequently mixed with the shipments.

The logs go to most of the principal countries of the world. Canada takes more than any other country, and almost as much as all other countries together. Its proximity to United States forests, along a line nearly four thousand miles long, makes it a good market. All timbers of the northern forests, both east and west, are liable to find their way across the international boundary into some part of the Dominion of Canada.

Germany is the second largest purchaser of miscellaneous round logs shipped from this country, England third, the Netherlands fourth. The Philippine Islands and Hongkong are large buyers. Their purchases come principally from the Pacific coast. Japan is a good buyer. That country ships timber to this country and buys other in return. The trade with Panama was very good in 1912, but it is a question whether it will continue after the canal operations cease. It is too small a country to become a large permanent buyer.

Crossties and Poles in Canada

The output of poles and crossties in Canada for 1912 has been tabulated by R. G. Lewis and Guy H. Boyce of the Canadian Forestry Branch of the Department of the Interior, and published by the Dominion government. As far as the records show the whole demand for poles is met by softwoods, except the use of 612 chestnut poles, which are less than one-tenth of one per cent. The total number of all kinds purchased in 1911 was 585,703, at an average value of $1.80 each. In 1912 608,556 were bought at an average cost of $1.83. The following table shows the number of poles and kinds of woods in 1912:

	Number	Av. Value
Total	608,556	$1 83
Northern White Cedar	378,569	$1 62
Western Cedar	144,222	2 83
Balsam Fir	38,000	.80
Tamarack	36,158	1.29
Spruce	9,127	1.13
Jack Pine	1,790	1 51
Douglas Fir	612	1 62
Chestnut	228	.64

Northern white cedar or arborvitæ supplies more than half of all, and western red cedar, or the shingle cedar of the Northwest, is second in importance.

Many of the pole-line companies use preservative treatments of different kinds to prevent decay and insect injury. These include impregnation of the butts of the poles with creosote, zinc chloride and other chemicals. In some cases the bark is left on that part of the pole which comes into contact with the soil, and this tends to increase the life with some kinds of wood. Painting the butts of the poles with hot tar or creosote will increase their life by several years. Many companies have found that the increased life which is secured by preservative treatment brings about a considerable saving in the annual cost of the upkeep of a pole-line. By thorough treatment with preservatives many non-durable woods, such as balsam fir, are being used satisfactorily where their use in an untreated state would not have been possible.

The number of crossties of all kinds purchased in 1911 was 14,389,242, at an average cost at point of purchase of thirty-nine cents each. Twenty-one woods were represented, but jack pine supplied more than one-third of all. The purchases for 1912 exhibit a large increase in number and value over those of 1911, as the following table shows in detail:

	Number	Av. Value
Total	21,308,571	$0 44
Jack Pine	7,783,034	$0 44
Cedar	3,332,105	.45
Douglas Fir	2,183,554	.30
Hemlock	1,947,474	.38
Tamarack	1,803,696	.45
Western Larch	1,196,184	.43
Oak	933,486	.67
Eastern Spruce	835,121	.40
Hard Pine	658,096	.66
Chestnut	266,082	.59
Beech	103,583	.68
Western Cedar	82,357	.35
Maple	51,465	.77
White Pine	44,408	.35
Birch	37,943	.60
Red Pine	26,646	.48
Balsam Fir	12,469	.13
Western Spruce	8,000	.58
Elm	2,868	.47

The increase in the number of ties purchased was well distributed over Canada, and was particularly noticeable on the transcontinental lines. The place occupied by jack pine is important. It is by all odds the leading crosstie wood of Canada at present, and there is no apparent reason why it should not remain so. It is abundant in a wide expanse of country, and grows as far north as railroads are likely to be built in that country. It is a small tree, and was formerly little thought of, but its real value has been learned. It flourishes under the arctic circle, and southward to northern Indiana.

Many Canadian railway companies are now beginning to realize the value of preserving at least a part of their tie material from decay and insect injury. The practice of chemical treatment of railway ties has been carried on by railways in the United States for some years with apparently satisfactory results.

The practice in Canada is just beginning, but is increasing rapidly with the increasing cost of tie material and the constantly decreasing supply. In 1910 practically no treated ties were used by Canadian railways. In 1911 some 206,209 ties received chemical treatment before being placed in the roadbed. This number, while forming only 1.4 per cent of the total number of ties used, was, nevertheless, an indication of the increase in this particular form of conservation. In 1912 a total of 1,818,189 ties were chemically treated. This number forms 8.5 per cent of the total number of ties purchased. Steam railways used 1,798,189 of these treated ties and electric roads used 20,000.

The treated ties were mostly hardwoods, as it has been found more economical to treat the heavier, stronger woods than those which are liable to fail from mechanical wear before they have time to decay. The greatest actual saving by preservative treatment is found in the use of the so-called "inferior woods," provided that these are properly protected from mechanical wear. Until the price of the durable woods becomes excessive the railway companies will not resort to expensive treatment of inferior woods on account of this cost of protecting them from mechanical wear.

A Good Example

That the lumber trade is awakening to the ill effects resulting from the falsely founded opposition on the part of people who are in a position to ascertain true facts as to the safety of steel car construction, is proven in the following letter which enters an emphatic protest against the circular sent out by a prominent association of traveling men to its members. The effect of such a circular upon the traveling public, of which a large percentage are commercial travelers, is apparent.

A united protest along the lines suggested in this letter will surely help a great deal. The letter follows.

Cincinnati, O., Oct. 7, 1913.

R. A. Cavenaugh, Sec'y.,
Illinois Commercial Men's Association,
Chicago, Ill.

Dear Sir:

I notice in your notice of assessment No. 77 just received, a circular supposed to illustrate vividly what happens to wooden cars in railroad wrecks and I am surprised that a man who is supposed to be as well posted in the facts of this matter as you, should take the position that you are taking in this circular, when the fact remains that wooden cars properly manufactured are more safe and cause less accidents than the steel cars.

You are evidently misled by the popular clamor and newspaper articles which the steel people have been having published for the past few years to boost their game and cause the public to demand steel cars, and have not gone into the merits of the two classes of equipment.

If you will refer to H. H. Gibson, editor of the HARDWOOD RECORD, Chicago, you can secure the actual facts and data showing that steel equipment is not what the steel trust have represented it to be.

As I know you intend and desire to work entirely for the interests of the traveling public and not for the steel trust, I am calling your attention to this matter and will be glad to have you investigate and ascertain the facts and not be guided by the articles appearing in the daily press which are inspired for selfish motives.

Yours very truly,
W. S. Starrett.

This letter comes from the sales manager of one of the largest lumber concerns in Cincinnati. HARDWOOD RECORD feels that Mr. Starrett's reference to its ability to offer substantial proof of the frailty of steel cars is warranted and stands ready at all times to back up such protests.

The Mail Bag

Any reader of HARDWOOD RECORD desiring to communicate with any of the inquirers listed in this section can have the addresses on written request to the Mail Bag Department, HARDWOOD RECORD, 537 South Dearborn Street, Chicago, and referring to the number at the head of each letter and enclosing a self-addressed stamped envelope.

B 575—Seeks Source of Supply Built-Up Red Gum Table Tops

Cape Girardeau, Mo., Oct. 3.—Editor HARDWOOD RECORD: One of our customers is anxious to form a connection with some reliable manufacturers of built up red gum table tops. Can you locate a reliable source of supply for this class of material ——— LUMBER COMPANY.

The writer of the above letter has been supplied with a brief list of manufacturers of red gum tops. Any others interested in the inquiry can have the address on application. EDITOR.

B 576—Seeks Location for Hub Plant

Tidioute, Pa., Sept. 29.—Editor HARDWOOD RECORD: Do you know of a good location where there is plenty of good birch suitable for making wagon hubs? ———.

A general range of territory for the location of hub works with an ample source of supply of birch has been given in answer to the above letter. Any others interested can have the address on application. EDITOR.

B 577—Seeks Hickory Squares

Naugatuck, Conn., Sept. 29.—Editor HARDWOOD RECORD: I am in the market for some No. 1 hickory squares 2X2X50". I could also use the same length and thickness, running any width, providing it was entirely clear of knots. Could you put me in touch with some reliable concerns which would care to consider my trade? ———.

The writer of the above letter has been supplied with a brief list of hickory dimension producers. Any others interested in the inquiry can have the address on application.—EDITOR.

B 578—Seeks Three-ply Maple Drawer Bottom Stock

Grand Haven, Mich., Sept. 27.—Editor HARDWOOD RECORD: Kindly furnish us with a list of manufacturers of $\frac{1}{4}$" three-ply maple veneer drawer bottom stock. ——— COMPANY.

The writer of the above letter has been supplied with a brief list of manufacturers of the material noted. Any others interested in the inquiry can have the address on application.—EDITOR.

B 579—Thinks Cypress Knees Suitable for Artificial Limb Production

Fairview, Ark., Sept. 30.—Editor HARDWOOD RECORD: Can you give me the address of some company manufacturing artificial limbs? I am informed that they use cypress knees for this purpose ———.

It is the opinion of the editor that some one is "stringing" the writer of the above letter. He has been supplied with a list of artificial limb manufacturers, and has been further advised that the usual material employed for this purpose is willow, and there is not the remotest chance that cypress knees would be available.—EDITOR.

B 580—Wants to Market Oak Core Stock

Charleston, Miss., Oct. 1.—Editor HARDWOOD RECORD: We shall appreciate it if you will send us names of veneer panel manufacturers, as we wish to dispose of some oak core stock which is very desirable for veneering purposes. ——— LUMBER COMPANY.

The writer of this letter has been supplied with a list of panel manufacturers. Any others interested can have the address on application. —EDITOR.

B 581—Seeks Lumber for Enameled Handles

Philadelphia, Pa., Sept. 8.—Editor HARDWOOD RECORD: I am opening a factory for the manufacture of enameled wood handles and specialties, and will buy my lumber in carload lots. I would appreciate it very much if you will furnish me with a list of a few firms who manufacture wood dowels, birch or hard maple, and also names of firms who cut birch, maple and ash to dimension sizes from $\frac{3}{4}$ to $2\frac{1}{2}$ inches square. Will buy both the square and dowels in car lots. ———.

The above inquirer has been furnished a small list of manufacturers of the stock he desires. Any others interested in this inquiry may have the address on application.—EDITOR.

B582—Wants Sycamore

Lancaster, O., Oct. 7.—Editor HARDWOOD RECORD: We are in the market for 100,000 feet 4 4 log run and 50,000 feet 5 4 log run, cut to order if necessary, quartered sycamore, loaded log run. Want prices in grades delivered on Detroit, Mich., rate.

Statement of Ownership and Management

Agreeable to the act of Congress of Aug. 24, 1912, requiring publishers of periodicals to file with the postmaster general and the postmaster in the office at which such publication is entered, a sworn statement setting forth the names and postoffice addresses of editors and managing editor, publisher, business manager and owner, and in addition the stockholders, if the publication be owned by a corporation, and also the names of known bondholders, mortgagees, or other security holders, and that such sworn statement shall be published in such newspaper or other publication, the following sworn statement is herewith printed:

HARDWOOD RECORD is published twice a month at Chicago, Ill.

The names and postoffice addresses of the editors are as follows:

Henry H. Gibson, editor and business manager, 5229 Greenwood avenue, Chicago, Ill.

Hu Maxwell, 927 Asbury avenue, Evanston, Ill., associate editor.

E. W. Meeker, 926 Airdrie place, Chicago, Ill., associate editor.

Publisher: The Hardwood Company, 537 South Dearborn street, Chicago, Ill., the officers of which are Henry H. Gibson, president; E. H. Defebaugh, vice-president.

Stockholders holding one per cent or more of total amount of stock are Henry H. Gibson and E. H. Defebaugh.

There are no known bondholders, mortgagees and other security holders holding any bonds, mortgages or other securities of this company.

(Signed) Henry H. Gibson,
Editor and Business Manager.

Sworn to and subscribed before me this sixteenth day of September, 1913. J. S. Pennington,
Notary Public.

My commission expires October 24, 1916.

Comments on "American Forest Trees"

The following letter has been received from H. S. Graves, of the U. S. Forest Service, Washington, D. C.:

September 8, 1913.

Mr. H. H. Gibson,
Editor HARDWOOD RECORD,
Chicago, Ill.

Dear Sir:

I have to acknowledge with my cordial thanks the receipt of your note of September 3 and also a copy of your recently issued book, "American Forest Trees," which is a handsomely made volume. For want of time now I have been able to look only hastily through its pages, but later I shall hope to give myself the pleasure and profit of a more careful reading. I am much impressed with the fact that you have produced a distinctly new kind of book, which combines enough of botanical classification to keep the reader straight as to species, etc., together with a very large amount of just the sort of information about important trees that the great mass of practical readers are likely to want. Your book is especially attractive in its simple and direct discussion alike of every-day and scientific facts. The selection of representative species, to each of which due prominence is given by most excellent photographic illustrations, are the ones the public knows something about, and, for this reason, will, I am sure, welcome your fuller accounts.

Very truly yours,
H. S. GRAVES, Forester.

"Timber News," London, England, in its issue of September 24, published the following comment on American Forest Trees:

We have had sent to us for review a splendid 700-page illustrated work with the above title, which has been compiled by Mr. H. H. Gibson, editor of the HARDWOOD RECORD, Chicago, the leading American trade jonrnal in its line. Mr. Gibson, it would appear, has also received considerable assistance in his labors from Mr. Hu Maxwell, a well-known expert in the utilization of American timbers. Of course, to give anything like a detailed account of a book running to 700 pages is, in these columns, an impossibility, but from a careful study of certain timbers which come well within our own knowledge we have no hesitation in saying that the work is the leading authority of its kind, and it is of so practical a nature that it ought not to be neglected by anyone interested in American forest tree growth or the resultant lumber production. It treats intimately the forest growth of the States, and lays special emphasis upon those trees and upon the form of lumber which have attained commercial value both in the home and foreign market. Each specialty is treated in a special illustrated article, and under its familiar common title, as well as under its botanic name. The illustrations are beautifully done, and in every case show the tree itself and in all its majesty as it stands in its native woods. We are told that the book is the result of twenty-five years' labor on the author's part, and we can well believe that this is so, seeing that it deals comprehensively with no less than 1,172 distinct types of trees. The whole is a most valuable reference work for timbermen not only in the States but on this side, and will make a substantial addition to any well-ordered library. The price of the work is six dollars (£1 5s.), and in our view it is more than worth the money. It is the most comprehensive publication on American woods which has ever been brought to our notice, and, apart from its commercial use, it is interesting, insomuch as it deals with timbers concerning which little or no public knowledge has ever before been afforded, and, in fact, of whose peculiarities and uses but few of us have ever heard. We cordially commend the work to our readers.

The "New Orleans Lumber Trade Journal" says:

One of the most notable contributions to forest literature is "American Forest Trees," by H. H. Gibson, editor The Hardwood Record. The book contains a fund of valuable information concerning over 500 species of commercial woods of North America, the data having been collected by Mr. Gibson for a period covering over one-quarter of a century. The work has been most ably edited by Hu Maxwell, formerly editor and wood utilization expert of the United States Forest Service, and deserves a prominent place in the library of every one interested in lumbering, wood utilization, or in fact, any phase of the broad subject of forestry. The book gives a most readable and non-technical description of the various species as well as excellent photographs and drawings of the individual trees, their flowers, fruit and foliage. Every region of the country is included and no valuable tree is omitted. The book is well printed on good paper and strongly bound in leather and cloth.

Being compiled and edited by Hu Maxwell the information presented is not only assured of being authentic and reliable, but of being written in a way that makes its reading a pleasure instead of a "grind."

Clubs and Associations

Pacific Logging Congress

The fifth annual meeting of the Pacific Logging Congress was held in Spokane, Wash., Sept. 24-27. A program of unusual interest was carried out, ending with a banquet and a visit to the lumber camps of the Potlatch Lumber Company, which carries on some of the largest operations in the West.

The proceedings of the congress were permeated with the progressive spirit of the western country where things are done on a big scale and by big men. Problems there are worked out to fit particular conditions, and in most cases results would not fit in eastern logging operations. Trees are large out there, and logs are heavy. The cutting, transportation, and other handling from the forest to the mill, are carried on in western ways, and the purpose of the congress was to discuss old methods and new and to take advantage of whatever promises improvement in present methods. That was the keynote of the meeting, trying out whatever promised to give better results.

Judson F. Clark explained to the congress the merits of a new timber scale which might properly be called a measuring machine for computing quickly the contents of a standing tree. It was claimed that cruising can be done much more expeditiously and correctly than by the old method of measuring the tree breast high and guessing at the top diameter.

The question of electrical logging machinery was discussed by a number of persons, after an opening paper on the subject by E. F. Whitney, who reviewed progress in that field of mechanics. The problems, of course, resolved themselves into the methods of applying power at the points where it is needed. This involves the use of various machines, and to some extent it was a debate as to what will give best results.

Cable tramroads and aerial skidding,—related subjects but involving different problems and calling for plants of different kinds,—were introduced for consideration in papers read by John A. McDougall and Lewis T. Hays. A paragraph from the address of the latter contains some interesting history. He says:

"Many of you are no doubt familiar with the aerial tramway as it has been designed for the transportation of ores and other similar products in mountainous districts, but you have little thought that this same idea and same system could be as successfully used to transport your logs from the woods to the railroad and in some cases direct to the mill. For many years aerial tramways have been extensively used in carrying sawed lumber in small quantities, but it has been only a matter of about five years that the aerial tramway has been seriously considered as a help to the logging industry. Usually the severe requirements in the logging camp have been considered to be a little beyond the field of aerial cable, but already, logs five feet in diameter and from sixteen to fifty feet in length are being satisfactorily conveyed a distance of five and a half miles by the means of aerial tramways. Different installations vary only in detail, the general results and finished equipment being quite uniform. But it would perhaps not be amiss to mention in passing a few of the aerial logging tramways in operation in various parts of the world. At Kolozsvar, Hungary, there is a logging tramway 7½ miles long, which serves two purposes; one of bringing the logs to the sawmills, and the other of conveying the sawed material to the shipping point. A line built near Podul Jloie in Roumania is over 10½ miles long; another installed for the Prometna Bank in Belgrade is about 3¾ miles long, with a fall of nearly half a mile, and runs from a plateau down a steep mountain side to a river. This line is of particular interest, due to the fact that the ground is particularly rugged; and in order to avoid sharp, vertical angles, tunnels were made through the rocky ridges."

Camp building and sanitation were considered to be very important details of successful logging. The fact is now generally recognized that men must be in good health and must be comfortably housed and must be made to feel not only comfortable but respectable in order to attain the highest efficiency. Their food and the manner in which it is prepared is given the most carefull attention. The kinds of houses provided for them and the beds in which they sleep are looked after in progressive logging camps, and it is said that investments judiciously made to better camp conditions pay good profits.

The welfare work of the Y. M. C. A. came in for much praise. The standard of large camps was improved by the reading rooms, lectures, and healthful amusements and means of recreation. The operators in instances referred to found crews much more reliable, better satisfied, and more efficient, and it was claimed that while the men received their benefits in better conditions, the proprietors also received theirs in the form of better dividends.

The forestry side of the business was presented in two addresses, one by H. R. McMillan, chief forester of British Columbia, the other by F. A. Silcox of the United States Forest Service. Each described the problems and policies involved in managing and putting on the market timber from government lands.

Among the other topics presented by formal papers should be included "The Tree Faller," by H. D. Langille. This is a machine, operated by a powerful screw, for forcing trees to fall in directions different from their natural lean.

Practical suggestions for logging steep hillsides were offered by H. W. Sessoms. Forest protection against fire was the subject of E. T. Allen's paper. He advocated organized patrol, in which the individual, the corporation, county, state, and nation should coöperate according to plans worked out in advance where it was practicable to do so.

Details in handling cars, particularly where grades are considerable, were explained by H. J. Robinson under the title "Handling Air." The comparative merits of different types of boilers was another topic to which considerable attention was given, as was also the subject of fuel for logging boilers.

Southern Logging Meeting

The Southern Logging Association met in New Orleans Sept. 29 for a two-days' session, with a program carefully prepared for practical work. The membership of the association consists of mill owners, timber owners, general superintendents, managers, and contractors. The discussions were directed toward the matter of greater efficiency, which includes more work for the same money or the same work for less money. Two Yale professors were among the speakers, and an address was made by a Y. M. C. A. worker. This was going somewhat outside the customary routine, but a number of operators or expert workers on special lines were on the program also, and the two days of the session were well filled with valuable suggestions.

The Y. M. C. A. representative was N. C. Schlichter, secretary of the international committee, Charlotte, N. C., who prefaced his remarks by warning the lumbermen that the worst enemies of a sanitary camp were flies and mosquitoes. One camp had forty-five cases of typhoid fever one year and reduced it to a single case the next year by a generous use of mosquito netting, supplemented by other sanitary improvements. It was stated that one of the best investments that could be made was well-cooked food for the workers. This suggestion referred particularly to large southern camps where negro laborers are employed. In some camps the negroes do their own cooking, and overload their stomachs with poorly prepared food. They are made stupid and lazy. A great improvement is seen when the food is cooked for them and is prepared in a wholesome manner.

Better bathing facilities are advocated, and improved arrangements for caring for those who suffer from accidents, including an operating room in the large camps.

Professor Herman H. Chapman of Yale read an exhaustive paper on the possibilities of a second crop of pine on cut-over land in the South. After explaining how this might be done, and the time and expense necessary, his conclusion was that it is usually too large an undertaking for the lumber company.

"The measures necessary," he says, "to secure reproduction and protection of seedlings would involve a slightly increased expense, would promise no immediate financial return, but would preserve the productiveness of the soil by insuring a timber crop on land not farmed, and might prove ultimately of great financial value to the land owners when they come to sell these lands. These measures can be urged only as a matter of far-reaching public policy. If timber owners believe that a second growth of seedling pine will be of great benefit to the community and state, it is in their power to secure it on their own lands now at less expense than at any future time or by any other owner, yet such a policy might not be profitable to them. Since it is possible that these lands may ultimately be used for agriculture, the state government can hardly be justified in any attempt to compel the timberland owners to undertake measures that will assure a permanent forest. States can encourage private efforts at reforestation by proper tax laws and fire protection, or such lands can be acquired by states and reforested at state expense. Along these lines, and not by arbitrary regulation, progress toward securing new crops of pine must be made."

A second address was by Ralph C. Bryant, also a Yale professor, on the subject of closer utilization of timber. The usual sources of waste were enumerated, such as high stumps, breakage in felling, crooked and forked trees, abandonment of merchantable tops, and others. Practical means were pointed out for lessening some of these wastes. One suggestion was that a saw-boss would bring about a considerable saving in large operations. His duties would require him to see every tree that was cut and make sure no unnecessary waste was permitted.

The proper feeding of stock is considered a great saving in large operations, and much of Professor Bryant's address was devoted to a consideration of the subject from a chemical standpoint, which was based on sound principles, though possibly a little beyond the understanding of the ordinary stable boss. However, a list of feedstuffs is given, with their relative values, and this will guide the teamsters who do not understand chemistry.

S. Regel, of the J. S. Betts Company, Greenville, Fla., read a paper giving the result of his experience in paying a bonus for extra work.

Fuel for logging engines was treated in a paper by J. F. Mahoney, of Laurel, Miss. The very natural ground was taken that logging engines should burn wood as a matter of economy.

A paper on logcutting was read by V. C. Langley, of the Wausau Southern Lumber Company, Laurel, Miss. Among the points made were these:

"A large tree that leans heavily should be notched to the depth of six

or eight inches, and if after you have sawed in this depth and cut it out, you deepen the notch in the heart from two to four inches, it will prevent, to a large extent, the pulling of long slivers, which we all know is a frequent and serious damage to the butt log. In measuring up your tree be sure that your sawyers are provided with a correct measuring pole. I use an eight-foot pole, plainly marked every two feet, and three, six and nine-inch measures on each end. I also use a strip of band iron on each end to prevent the pole from being cut. I do not think it is policy to do any long butting at the present price of stumpage, as there is scarcely a butt log but what you can get enough short timber to considerably more than pay for the cost of handling."

Important Matters Before Memphis Club.

The regular semi-monthly meeting of the Lumbermen's Club of Memphis was held at the Hotel Gayoso Saturday afternoon, October 4, with fifty-four members present. Owing to the absence of President John M. Pritchard, who was in Georgia, H. E. Weiss, first vice-president, was in the chair. Although this was his first attempt at presiding, he showed himself quite familiar with parliamentary tactics and acquitted himself most commendably. He was very much teased just after luncheon, however, when, through a decoy note supposed to be from the lady he is soon to marry, he was lured from the chair of the presiding officer and led to seek the foyer of the hotel in search of the writer of the missive. While he was gone it was tipped off that the note was all a joke and when he returned after having been unable to locate his fiancee, he was given a round of hand clapping that he will probably remember almost as distinctly as his wedding itself.

The principal feature of this meeting was the report of the river and rail committee, made through John W. McClure, its chairman. This committee was instructed at the last meeting to confer with officials of the Illinois Central and other lines entering Memphis with respect to the correction of the weighing abuses which have resulted in many claims for overweight. Mr. McClure said that his committee decided that the best procedure would be to take the matter up with the Illinois Central officials first and later with the other roads. A conference with the latter was held on Friday and Mr. McClure said that the Illinois Central honored the club by sending to this conference some of the highest officials of the entire system, including Mr. Foley, the general manager, Superintendent Porterfield, with headquarters in New Orleans, and Superintendent Egan, of the Yazoo Mississippi Valley road, with headquarters at Memphis. Mr. McClure said that, after the committee had presented the club's side of the case, the railroad men said they would do everything possible to correct the evils and asked for suggestions. The committee, according to Mr. McClure, advised the railroad to carry out the suggestions of the Interstate Commerce Commission regarding weighing all cars uncoupled. This the officials agreed to do on all outbound shipments but intimated that it was not feasible at the moment to comply with this suggestion on inbound shipments of logs and other freight. The committee thereupon urged that, in any event, all cars thirty-four feet and under be weighed uncoupled, as most of the claims have arisen in connection with the smaller cars. Mr. McClure was much impressed with the spirit of harmony that prevailed during the conference and with the disposition on the part of the railroad men to co-operate with the lumbermen in every way.

Mr. McClure also said that during the conference the subject of the payment of claims came up and that the committee secured the assurance of General Manager Foley that all claims would be promptly paid in future and that every shipper would be given an absolutely fair deal. He further reported that the Illinois Central, while organizing and maintaining a weighing and inspection bureau of its own, had not withdrawn from the Southern Weighing and Inspection Bureau but would make use of both in attaining the best results. He further said that all claims would be referred to the claim department of the Illinois Central system. Mr. McClure suggested that all complaints and claims arising against the Illinois Central system be handled in a spirit of harmony, owing to the attitude disclosed at the conference by the officials present. He said also that Superintendent Egan, of the Yazoo & Mississippi Valley line of the Illinois Central, had invited the river and rail committee and all interested lumbermen to go with him on his private car to the scales of the road in order that these might be tested and in order that they might see just how they were being operated. The date for this inspection trip will be announced later.

The committee was authorized by the club to confer with the officials of the other initial lines in regard to weighing cars and it was also authorized to confer with the proper officials of the Illinois Central system regarding the advisability of paying through the Memphis office all rate claims and all refunds on log shipments. The committee was still further authorized to secure from the Interstate Commerce Commission a ruling on minimum weights in the case of cars a fraction over thirty-six feet in length as there has been some controversy in regard to this point.

The river and rail committee informed the club that a bill had been introduced in congress giving the Interstate Commerce Commission authority over weighing of cars, including the actual weighing, regulation and testing of scales and other features. The committee announced that they had read this bill but that, in their opinion, it did not go far enough because it did not clothe the commission with authority to protect shippers fully. The committee thereupon was authorized to draw up recommendations and forward these to Tennessee representatives in congress through which broader authority will be conferred on the commission.

F. T. Dooley of the membership committee reported that he and associates had approved the application for active membership made by L. J. Brown, manager of the southern department of Upham & Agler, and this gentleman was duly elected. The membership committee reported two other applications at this meeting, one for active and the other for associate membership. They will be voted upon two weeks hence.

F. E. Stonebraker, chairman of the special committee having charge of the furnishing and equipment of the rooms offered the Lumbermen's Club in the Business Men's Club, said that contracts had been let for the interior woodwork and also for the furniture, rugs and draperies. He requested that all the lumbermen who were to furnish specimens of their output to be used in the interior finish send in their selections at once so that the contractors might proceed. He said the rooms would be ready for occupancy during the current month.

F. B. Robertson, chairman of the red gum committee, said that he had received a letter from Himmelberger-Harrison Lumber Company, Cape Girardeau, Mo., suggesting that a meeting of red gum manufacturers be held in Memphis Oct. 18, preceding the meeting of the Lumbermen's Club of Memphis on that date. The club was in favor of this suggestion and indications are that the meeting will be arranged for that date. All visiting delegates will be asked to attend the meeting of the club as guests. Mr. Robertson said that announcements regarding the meeting would be made at a later date and urged that all red gum manufacturers and those otherwise interested in this lumber should attend. Red gum, as is well known, has not been moving freely for some time and the conference is to be held with a view to discussing market conditions and other phases of the situation.

Cincinnati Club in Monthly Meeting

On Monday, Oct. 6, the Lumbermen's Club of Cincinnati held its regular monthly meeting at the Business Men's Club. The usual course dinner was served promptly at 6:30 P. M., after which President C. C. Hagemeyer called the meeting to order.

More or less inconvenience has been incurred by the lumbermen of this section on account of the lack of proper reconsigning arrangements with one of the local railroads and the president's action in naming a committee which has taken up the matter vigorously with the road at fault was readily ratified.

One of the important matters discussed was the proposal to bring the next convention of the Ohio Retail Dealers to this city. This association will meet in January next and the proposition to invite them to meet here and to arrange for their proper entertainment met with the hearty approval of all members present and the president and secretary were authorized to extend to the association a hearty welcome to be the guests of the Lumbermen's Club during the convention. Mr. Henry Doppes of J. S. Doppes & Son, one of the directors of the association, inaugurated the movement and was present at the meeting.

The committee appointed at the last meeting to draw up resolutions on the death of Thomas J. Moffett of The Maley, Thompson & Moffett Co. made a complete report and the secretary was ordered to send a copy of same to the family.

The following firms were elected to membership, which makes thirteen new members in two months, many of them being firms recently moved here: The Kosse, Shoe & Schleyer Company; Oden, Elliott Lumber Company; The Cherry Lumber Company; J. P. Baker; Bushirk-Rutledge Lumber Company; and Geo. C. Brown & Co.

North Carolina Trade Engages Rate Expert

The Western North Carolina Lumber & Timber Association with headquarters at Asheville, N. C., has engaged C. H. Beaman, a rate expert of Washington, D. C., to prepare its fight to secure lower rates on lumber shipments on intra-state business. Mr. Beaman is now at Asheville and is busily engaged in preparing the case of the lumbermen.

Mr. Beaman at a conference with a committee appointed by the president of the association to go into the rate matter, went into detail as to the various data prepared tending to prove that the lumbermen's claims for lower rates on North Carolina business are justified. Seemingly the case that they will submit will be a strong one, and the sentiment of the trade seems to be that a generally lower level of rates, more in conformity with intra-state rates for surrounding states, will result from the suit.

No Charge for Ocean Bills of Lading

The National Lumber Exporters' Association has succeeded in getting the steamship lines that run to Norfolk to rescind their order imposing a charge of fifty cents for every set of ocean bills of lading they make out. The order was issued not long ago and caused much dissatisfaction among the exporters of lumber not only because of the trouble the charge would have entailed, but the additional expense. Secretary J. McD. Price of the association was directed to make representations to the companies, with the result that they were induced to see the inequity of the charge and withdraw the regulation. It was intimated to the steamship companies that such a charge might be in violation of the Harter Act, which provides that a transportation company shall issue such documents as are necessary to identify the shipment, and this is construed

by the National Lumber Exporters' Association to mean that the issuance of ocean bills of lading is part of the duty of the carrier, and that no charge shall be made therefor. What it would have meant to the steamship companies, and as a consequence to the shippers, appears from the statement that in numerous instances as many as 800 sets of ocean bills of lading are made out on one cargo.

Meeting St. Louis Exchange

At a meeting of the Lumbermen's Exchange of St. Louis, held at the City Club, Friday noon, Sept. 26, steps to compel the railroads in this state to make their rates comply with a schedule that went into effect last July, as the result of the United States court holding that the state had a right to establish rates within its limits, were discussed and formulated. According to statements made at the meeting by the various lumbermen who were present, both the shippers and the receivers were being and still are overcharged since the law went into effect, because the railroads will not obey the law.

As the result of the meeting, there was a committee appointed to investigate and handle the matter. The committee as named by President Smith was composed of H. A. Boeckler, Chairman, W. A. Anderson, C. L. Harrison, Robert W. Abeles Jr., W. L. Fristoe and Charles E. Thomas. This committee is composed of two manufacturers, two tie firms, and two St. Louis yard dealers.

The report of Secretary McBlair, submitted to the Board of Directors at a meeting held Oct. 2, showed the Exchange to be in a most prosperous condition. The inspectors of the Exchange have inspected over 700,000 feet each week during the last month in addition to the inspections made in Ohio, Indiana, Illinois and Michigan.

October Calendar Lumbermen's Club, Chicago

The Lumbermen's Club of Chicago announces an interesting calendar showing the social events on the card for October. Two of these festivities have already taken place, the first being a stag for members and guests, which occurred on the first of the month and which was a thoroughly enjoyable affair.

On the eighth the members and their families gathered for an evening of cards, "500" being played. Mrs. F. R. Gadd, Mrs. E. E. Skeele, Mrs. F. L. Johnson, Jr., and Mrs. A. H. Ruth were the hostesses for the evening. The opening card night was a distinct success.

On October 15 the members will be treated to an evening full of varied entertainment consisting of the opening games of the auction bridge, billiard and pool tournaments.

On October 22 an informal evening of dancing for members and guests is on the program, and the last event of the month will be an auction bridge for the men, taking place on the evening of October 29.

Lumbermen's Club News

The Lumbermen's Club of Chicago offers an attractive little publication with the above title. The first number of the first volume was issued about the first of October for the month of October, and the leaflet will be issued once a month in the future. It is published in the interest of the club members and contains various interesting news items regarding the activities of the lumbermen and other members.

The idea of the publication is to awaken greater interest among the membership in the club doings, as it will contain reports of the various social functions and other happenings in the club rooms.

Meeting National Lumber Manufacturers' Credit Corporation

The annual meeting of the National Lumber Manufacturers' Credit Corporation will be held in Norfolk, Va., Oct. 11, in accordance with the articles of incorporation, when the officers of the National Lumber Manufacturers' Association will be elected officers of the credit corporation, and the constitution will be amended providing for the holding of the annual meeting of the corporation immediately following the annual meeting of the National association in the spring.

The October issue of the "Blue Book" is now on the press.

Northern Manufacturers to Meet October 29

The Northern Hemlock & Hardwood Manufacturers' Association announces Oct. 29 as the date of its next meeting to be held at Eau Claire, Wis. This announcement has just been made by R. S. Kellogg, secretary of the association. The meeting will follow the usual program, and, as is always the case, those attending will be well rewarded in the matter of specific discussions and addresses on subjects directly pertinent to the lumber business in the North.

Michigan Forestry Association to Meet

The Michigan Forestry Association will hold its annual meeting Oct. 24 in Muskegon, with sessions in the First Congregational church and the Woman's clubhouse. Friday morning will be devoted to business, with reports and election of officers and at the afternoon session there will be talks by officers of the association, including President Garfield of Grand Rapids, Secretary Lovejoy of Ann Arbor and Professor Roth, head of the forestry work at the University of Michigan. Women of the state who have been most active in the forestry movement, including Mrs. L. L. Mautner of Saginaw, Mrs. Francis King of Alma and Mrs. Elnora Chamberlain, will also speak. There will be discussion of the present status of the movement in the state with plans for future action. Professor Roth will give an illustrated lecture in the evening at the clubhouse and also in the First Congregational church Sunday evening, Oct. 26.

In this connection it is interesting to glance at the report of Thos. B. Wyman, secretary-forester of the Northern Forest Protective Association in the upper peninsula, for the six weeks from Aug. 1 to Sept. 15. Mr. Wyman was one of the organizers of the state forestry association in Grand Rapids. His report shows the loss to members because of woods fires in this critical period was slight. The rangers were active and nipped in the bud some fires that had a nasty look. Of the seventeen fires reported the leading cause of same were locomotives and camp fires. An encouraging feature is that in a number of instances fires were reported to wardens after having been put out by party reporting same, which is in line with the efforts of the association to get the coöperation of all woods travelers. In the matter of burning slashings, which are a menace to standing timber, the association offers to operators the services of its best men after the fall patrol season.

First Meeting St. Louis Club

The Lumbermen's Club of St. Louis will give the first fall banquet and business meeting either the latter part of this month or one evening during the first week in November. It will probably be held at the Mercantile Club. It was originally set for the early part of October but so many other functions were to be given during the early part of the month it was thought best to postpone it until the time mentioned.

It will be known as Architects' Night. Quite a number of architects from other cities such as Kansas City and Chicago will be present as the guests of the club and talk from the side of the architects. The out of town lumber interests will be represented by J. B. White and R. A. Long. They will speak from the viewpoint of the lumber interests. The topic to be discussed will be commercial sizes of lumber. In addition to the talks by the above men, there will be something else on the programme, which Julius Seidel, in charge of the entertainment, will not divulge.

As a prelude to the regular meeting, on Thursday, Oct. 9, there will be a buffet luncheon in the club rooms in the Wright building. There will be music as well as plenty to eat and drink. Not only have local members been invited to the luncheon, but many from the county. The membership of the club is growing very fast. It is now one of the most influential as well as the largest lumber clubs in the country.

Michigan Manufacturers to Meet

The fall meeting of the Michigan Hardwood Manufacturers' Association will be held at the Pontchartrain hotel, Detroit, Mich., Wednesday, Oct. 22, at 10 a. m.

Among the subjects to be discussed are: Present market conditions, stocks, hemlock bark figures, proposed cut for 1913-14, Forest Products Exposition, insurance, report of forest fire protective department and reports of special committees.

As many of the members will be soon making reports of coming winter's cut of hardwoods and hemlock, information as to present stocks and values will be of much value. Therefore a full attendance is urged in the announcement.

With the Trade

Plans for Chicago Lumbermen's Building Nearing Completion

Plans whereby the lumber trade of Chicago, the Lumbermen's Association and the Lumbermen's Club will be housed under the same roof have been in process of formulation for some little time. The matter came to a definite head about a year ago when a committee was appointed by the association for the purpose of working out a definite plan. This committee consists of George J. Pope, E. A. Thornton and Edward E. Skeele, and it has been very active in its efforts to arrive at some satisfactory plans to submit to the membership of the association. It announces now that it will probably have plans formulated definitely enough to announce them before the next meeting of the Lumbermen's Association which will be held within a short time.

It is probable that a plan will be adopted accepting arrangements made by the McCormick estate for space in a building to be erected at the corner of Madison and La Salle streets on the site of the old Roanoke Block. This building will be called the Lumbermen's Exchange Building, if the plans in mind are successfully carried through. It is expected that the McCormick estate will begin the erection May 1, 1915, and in order to take advantage of the offer, it will be necessary to have contracts signed for space aggregating 75,000 square feet before Nov. 1, 1913.

The plans provided for a building sixteen stories high, and it is further provided that lumbermen can secure space from the third floor up. It is proposed to house the Lumbermen's Club and the Lumbermen's Association of Chicago on the top floor, which will offer a very good start in the matter of securing the rental of sufficient space to close the deal.

Exposition Scope Broadening

J. E. Rhodes, secretary of the National Lumber Manufacturers' Association, announces that plans for the coming Forest Products Exposition are broadening to cover more than the mere lumber and finish end of the business. Energetic efforts are being made to secure information from and exhibits on the part of prominent manufacturers of such products as wooden novelties, woodenware, toothpicks, etc. These exhibits, if secured, will aim to show the products, plants, organization and policies of such

manufacturers. The object of securing these exhibits is to add life and interest to the show and to broaden its scope so that it will embrace as much as possible all the products of the American forests.

Death of Ben Collins, Jr.

The Chicago lumber trade lost one of its most popular members a week ago last Monday, Sept. 29, when Ben Collins, Jr., president of the Collins Lumber Company, died at his home 5304 Cornell avenue, after a week's illness from diabetes. Mr. Collins' career as a lumberman covered the greater part of his forty-two years of life. He had been prominently connected with the pine business ever since entering lumber circles. His first big connection was as vice-president of the Continental Lumber Company of Houston, Tex. He subsequently became connected with the Mercantile Lumber Company of Kansas City, and later organized the Collins Lumber Company, Chicago. This concern has been doing business for about five years, with Mr. Collins as its head.

Mr. Collins was prominently connected with the affairs of the Lumbermen's Association of Chicago and the Lumbermen's Club of Chicago, being one of the most popular and influential members of both organizations. He was widely known as a golfer in this territory and made a splendid record as a member of the Midlothian Golf Club. He was a Mason, being a member of the Medinah Temple of the Shriners of Chicago, and also a member of the Union League Club, South Shore Country Club and Chicago Yacht Club.

Mr. Collins leaves a widow, but no children.

The funeral services took place on Wednesday, Oct. 1. The remains were shipped to Covington, Ky.

Coulson Lumber Company Starts Construction

The latest addition to the hardwood lumber industry at Memphis, Tenn., is the Coulson Lumber Company, which has recently been granted a charter under the laws of this state and which will engage in the manufacture of hardwood lumber. The mill will be located at Morehead, Miss., and will have a daily capacity of from 30,000 to 35,000 feet of band sawn stock. The headquarters of the company will be maintained at Memphis. W. N. Coulson, who has been for a long while manager of the lumber sales department of Lee Wilson & Co., is president of the new firm. B. C. Sweeney, also connected with Lee Wilson & Co., is vice-president and will have charge of the milling operations. C. M. Green is secretary and treasurer. He has also been for some time in the employ of Lee Wilson & Co. It is expected that the new plant will be in readiness for operation about the first of the year. Part of the machinery for the plant has already been ordered and work is going ahead on the buildings to be used by the company for the mill and for storage purposes.

Memphis Lumbermen Agree in Log Wiring Controversy

A conference was held last week between representatives of the Valley Log Loading Company with headquarters at Memphis, and various members of the Memphis trade, for whom this concern hauls logs from the rights of way through Arkansas, Mississippi and other surrounding country.

W. S. Darnell acted as chairman of the conference, which was called for the purpose of considering a complaint entered by the sawmills in Memphis against the announcement that the Valley Log Loading Company would charge fifty cents a car for wiring of logs. The final settlement of the discussion was satisfactory to both sides.

The basis of the charge has been the cost of material used in wiring, but according to the new arrangement heavy cable bought especially for the purpose of securing logs on cars will be used. The charge of fifty cents a car will be levied but reparation will be made if the cables are returned to the company after unloading.

Final Fiber Box Arguments

The final arguments in the fiber box case were heard before the Interstate Commerce Commission at Washington, D. C., yesterday, Oct. 9. The National Classification Committee of Lumber, Wooden Box and Allied Interests met in Chicago, Sept. 24, and went over the case with attorney M. F. Gallagher. As it was announced that the fiber box manufacturers would be represented at the hearing by a large delegation, the committee requested all lumbermen who might be in the vicinity of Washington, or who could make it convenient to be there, to attend the meeting.

A meeting of the lumber and box men was held at the New Willard hotel, Washington, D. C., Oct. 8 at 2 P. M.

The committee feels that the attorneys have the case well in hand, and that it will be obligatory upon the commission to eventually issue a decision upon the complaint relative to the merits of fiber and wooden containers for certain kinds of freight, and to specify maximum weights for the same.

Home from Europe

C. L. Willey, the Chicago mahogany magnate, is home from a three months' trip to Great Britain and the Continent. Mr. Willey comes back fully recovered from his indisposition of last spring and is in fine form physically. He reports a manifest scarcity of fine figured mahogany and other fancy woods that are largely marketed in the Liverpool market, but purchased upwards of 2,000,000 feet of high-class wood which is now arriving at the big Chicago works.

Mr. Willey's Chicago plant has recently been equipped with two new bandsaws in place of the single band rig formerly employed, and the institution is very busy in the production of not only mahogany lumber, but of vermillion and black walnut as well as of large quantities of sawed, sliced and rotary cut veneers.

Murphy-Weiss

W. B. Murphy of Brinkley, Ark., has issued invitations for the marriage of his daughter, Miss Katherine May Murphy, to Harry Bonus Weiss, secretary-treasurer of Geo. C. Brown & Co. of Proctor, Ark. The wedding will take place at Brinkley, Ark., Wednesday afternoon, Oct. 15, and will be celebrated in the First Baptist Church.

Mr. Weiss has been prominently connected with the lumber business for some time, having made his headquarters in Chicago, Cincinnati and Memphis before his removal to Arkansas. He is vice-president of the Memphis Lumbermen's Club, a member of the Businessmen's Club of Memphis, and is also connected with other business and social organizations of that city.

Carr Lumber Company Incorporated, Pisgah Forest, N. C.

A charter was issued on Sept. 29 to the Carr Lumber Company of Pisgah Forest, Transylvania county, N. C. The company is capitalized at $25,000, authorized, of which $2,500 is subscribed by Louis Carr and others. The company will engage in the general lumber business and construct flumes and railroads for handling timber to its mill.

Allis-Chalmers Company Moves Sales and Engineering Offices

Announcement is made that the Allis-Chalmers Company of Milwaukee, Wis., has moved the sales and engineering departments from Chicago to West Allis, Wis. The removal occurred on Oct. 7.

It is further planned to eventually move the shops to West Allis so as to concentrate the entire working and administrative forces at one point.

Pertinent Information

Steamship Companies Rescind Order for Marking Export Lumber

Secretary J. McD. Price of the National Lumber Exporters' Association, who attended the conference between steamship representatives and members of the National Lumber Exporters' Association from Tennessee, Louisiana and Texas held in New Orleans on Sept. 18, stopped at Chattanooga on his return for a conference with Fred Arn of the J. M. Card Lumber Company, who is president of the association, but his duties in connection with the committee for the reception of the Grand Army of the Republic at the annual reunion of the veterans prevented his attending the New Orleans conference. With Mr. Arn, Mr. Price went over the action taken at the meeting, also various other matters. The chief subject taken up at the conference in New Orleans was the new rule promulgated by the steamship lines with terminals at New Orleans relative to the marking of export lumber. This rule, which was to have gone into effect on Oct. 1, provided that carload shipments containing more than one mark or countermark would be declined and that through bills of lading must be either discontinued, or the railroad, as the agent for the shipper, must turn over each and every piece of lumber so that the mark upon the through bill of lading can be identified, "and all such marks must be easily decipherable and permanent." As a result of the exchange of views, the Leland Line, on the following day, by letter withdrew the new regulation, and the presumption is that the other companies did likewise, although the proceedings were held behind closed doors and nothing has been given out about them. It is pointed out by exporters here that insistence upon the new regulation would have imposed great hardship upon the exporters and would have virtually made exports prohibitive. Practically all lumber shipped to foreign countries, it is stated, goes out under the special brand of the shipper, whose brand is as much or even more a designation of quality as the naming of a distinct grade. Time, effort and expense have been devoted to making these private brands known and they go far to facilitate trade. It is therefore obvious that the private brand of the exporter should appear upon the planks exported. But it happens very often that one exporter sends lumber of the same quality and character to several buyers abroad, and to put merely the private brand upon the lumber would make it impossible to determine what lumber goes to one man and what planks to another. Under the established practice each piece is numbered, the numbers being entered upon the bill of lading. Numbers alone would not serve the purpose for the reason that without the private brand the pieces sent out by various shippers on the same steamer could not be separated. A brand and number are consequently indispensable, and sometimes a third mark is desired. The requirement that every piece be turned over would be burdensome because of the expense attached thereto. The force of the arguments presented evidently appealed to the steamship lines, and while they have not given any promise, expressed or implied, that the proposed rule will not be resurrected, the belief prevails that the matter has been disposed of. Apart from the reasons stated it has been suggested that the proposed rule might have been a violation of the Harter Act, which requires that carriers shall issue documents needed to identify shipments. This question, however, has not been raised.

Commerce Court Abolished

The Senate Appropriation Committee at Washington last week gave the final blow to that institution of unquestioned value, the Commerce Court, when it acquiesced in the provision passed by the House of Representatives in the Urgent Deficiency bill whereby the court was abolished, and the jurisdiction which it was given formerly was allotted to the various district courts.

The advocates of the court have fought a hard battle and have used every effort to convince those opposing it of the unfairness of cutting off a tribunal before it had been given any kind of a trial to demonstrate practically and not theoretically whether or not it was a feasible proposition. Even the attorney-general of the United States expressed himself as favoring the continuance of the court when he was brought to realize the congestion in the other courts due to the addition of many cases involving litigation over shippers' appeals, brankruptcy and patents.

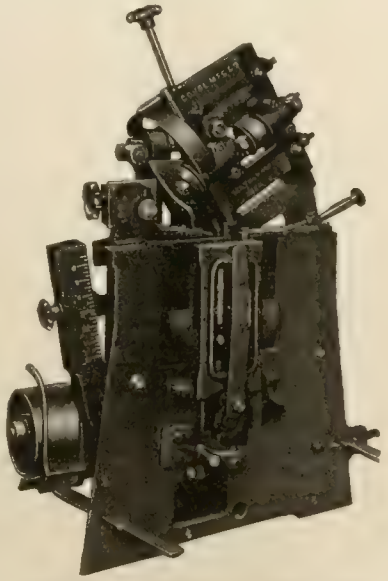
Now that the court has been abolished it will be interesting to follow the course of discussion as to whether or not the judges who composed it will be recalled as is provided in the House measure, of which it is difficult to understand the purpose, or whether they will be transferred to circuit courts and continue in office during good behavior as is provided in those cases. It is argued that a recall of the judges by a majority vote of the House is unconstitutional.

An Excellent Automatic Band Saw Sharpener

In this connection is illustrated an excellent type of automatic band saw sharpener manufactured by the Covel Manufacturing Company of Benton Harbor, Mich. This concern needs no introduction as a manufacturer of this type of machinery, and the machine herein described is one of the best it produces.

The machine will automatically sharpen all kinds of band saws, with any shape teeth, with its capacity. It has all the adjustments and advantages of many larger machines, with fifty less parts, and has many new and important improvements such as a positive direct automatic feeding arrangement, new and rigid frame construction, all working parts self-contained, enclosed worm and worm gear, and positive control of lifting lever.

The main frame of the machine is cast in one piece and all the working parts are mounted on the frame. In operation the strain from feeding the saw or lifting the emery wheel is all taken up in this frame so there is no vibration resulting from it. The same high type of construction and generosity of design and material used is carried out in the entire machine, including the shafts, cams, rollers, bearings, head, worm and worm gear.



COVEL AUTOMATIC BAND SAW SHARPENER

The head is so constructed that it will accommodate teeth with hook up to 30 degrees. The stroke of the feed finger can be adjusted to take teeth from ½-inch to 1¾ inches from point to point. This adjustment is automatic with the emery wheel, as it does not change their relation. This is the only saw sharpener having this feature.

The stroke of the emery wheel can be varied at least 50 per cent, that is, if a cam for a ½-inch deep tooth is used the same cam will take a 1-inch tooth, which makes the machine very easy to adjust and with the three cams regularly furnished, it can be made to take any shape and size of tooth within its capacity.

The belt of the emery wheel is automatically held in the same tension at all times by a spring, which makes the machine pull a heavy load with the least amount of friction.

The machine requires a floor space of only 21 inches by 28 inches, and has an extreme height of 37 inches, which features combined with the others mentioned, make it an excellent type of machine for any class of filing room.

E. C. Atkins & Co.'s Complete Memphis Branch Building

E. C. Atkins & Co., Inc., Indianapolis, Ind., manufacturers of the famous "Silver-steel saws," have just completed the erection of a new building at Memphis, which will be used as a branch. The building is ideal in every respect for the purpose for which it is intended. It includes convenient arrangements for the receiving, storing, distributing and shipping of the Atkins' saws, saw tools, sawmill specialties and general supplies.

The building proper has a frontage of 40 feet and a depth of 160 feet. The sides are mainly of glass, so that it is extremely well lighted. The address is 477 South Main street, Memphis, which is in the center of the wholesale district, being within easy access of the railroad stations and on a direct car line between them and the hotel district.

There are two large display windows on the ground floor, and a double vestibule entrance in the center. The office space is on this floor and is 16 feet wide, divided by brass rails into commodious offices for the heads of the different departments.

Displayed on the first floor is a full line of filing room machinery, cross-cut saws and handsaw stock, as well as a general line of heavy special machinery and shelf stock and duplicate stock.

The shipping department is in the rear of the first floor and is so arranged that trucks and drays may be driven to the inside of the building for the reception of incoming and loading of the out-going freight. A complete line of cordage, piping, shafting, power transmission and other heavy goods will be carried in the basement, while the second floor will be taken up with steel and wood split pulleys and belting.

Memphis Club Offers Lumber Statistics

The Lumbermen's Club of Memphis, through its committee on statistics, offers a report covering the amount of business handled in Memphis and by Memphis concerns during the year 1912. D. F. Heuer of Albert N. Thompson & Co. is chairman of the committee.

The report states that, contrary to the past policy, the important item of lumber handled through the retail yards was included. The report further states that the suspension of operations during the floods of 1912 had no material effect upon the general business of the community.

The full report follows:

	Total Feet	Total Value
Amount of lumber manufactured in Memphis	134,299,000	$ 4,027,970
Amount of lumber manufactured outside of Memphis	110,691,417	2,767,411
Amount lumber handled through Memphis wholesale yards not included in amount manufactured	84,997,540	2,975,245
Amount lumber handled through Memphis retail yards not included in amount manufactured	87,516,000	1,772,199
Amount of lumber handled on direct shipment from mills and yards outside of Memphis, not included in amount manufactured	128,164,748	2,835,080
Amount of veneers under ¼-inch thick manufactured in Memphis	79,879,404	762,564
Amount of veneers under ¼-inch thick handled through Memphis	570,440	12,170
Total handled	626,118,549	$15,152,639
Amount of lumber and veneer exported from Memphis	18,322,410	824,508
Amount of lumber and veneer exported from outside points	20,586,750	720,536
Amount of logs received in Memphis by rail and river	109,212,070	2,407,575
Amount of lumber on hand in Memphis January 1, 1913, on wholesale yards	71,605,244	2,454,084
Amount of lumber on hand in Memphis January 1, 1913, on retail yards	22,148,000	448,000
Amount of lumber on hand outside of Memphis January 1, 1913	53,083,108	1,477,404
Amount of logs and bolts received at Memphis and manufactured into hoops, heading and other cooperage stock	18,432,350	370,500
Amount logs and rough material received at Memphis and manufactured into vehicle and implement stock turned work and pump rods	8,556,645	251,660
Amount of lumber consumed by furniture factories, coffin factories, box factories, planing mills, flooring factories, etc., in Memphis	64,192,560	1,348,440

A Hint for Exporters

The Consular report from Ghent, Belgium, offers a suggestion which might be interesting to exporters of American lumber. The report states that supplies of lumber imported into Belgium by sea are mainly from Russia and Scandinavia, and that the mining timber imported is mainly destined for consumption in the mines of the Hainaut, while the building lumber is consumed in the Flemish provinces. The report then says that the trade in American lumber could be considerably extended as woodworking and up-to-date cooperage establishments are showing evidence of satisfactory development. One concern engaged in the latter industry employs about 1,000 operatives.

Two Tall Masts

The Canadian government is constructing at Kingston, Ontario, a wireless station as one of a number which will ultimately cross the country from Newfoundland to the Pacific coast. A prominent feature of the station at Kingston will be two enormous masts of Douglas fir, each 185 feet high. Wireless station towers much taller than these have been erected, but there appears to be no record of any of wood surpassing that height. The Kingston masts will be twenty-six feet taller than the celebrated flagstaff at Kew Gardens, England.

Hardwood News Notes

MISCELLANEOUS

The Norton Hardwood Company at Norwalk, O., has sustained a loss by fire.

The National Handle Company at Almyra, Ark., has been succeeded by Earl Rhodes.

The Berry Hartwell Handle Company has recently commenced business at Little Rock, Ark.

The Crenshaw-Gary Lumber Company, Ritchey, Miss., has increased its capital to $75,000.

The Union City Body Company, Union City, Ind., has increased its capital stock to $75,000.

The Keyser Lumber Company has started business at Keyser, W. Va., and is capitalized at $5,000.

The Houma Cypress Company has succeeded the St. Louis Cypress Company, Ltd., at Houma, La.

The McFarlan Carriage Company, Connersville, Ind., has filed an involuntary petition in bankruptcy.

The Sussex Lumber Company has been incorporated at Sussex, Va., with an authorized capital of $50,000.

The New Cabinet Company has been incorporated at Indianapolis, Ind., with an authorized capital of $150,000.

The Chapin Wagon Company of Owego, N. Y., has been incorporated with an authorized capital stock of $25,000.

The Lost River Lumber Company is the style of a new corporation at Romney, W. Va. The company will operate with a $150,000 capital.

W. G. Cochran of Marion, Ill., has incorporated and will operate under the style of W. G. Cochran Lumber Company. This company is capitalized at $10,000.

At Jackson, Miss., the Jackson Hardwood Lumber Company has recently been incorporated with a capital stock of $10,000, by E. D. Brewer, Chas. Baskett and others.

CHICAGO

Acknowledgment is made of the receipt of several specimens of oak flooring now being produced at the new flooring plant of the Saline River Hardwood Company, Pine Bluff, Ark. This company is manufacturing upwards of 50,000 feet of plain and quartered white oak daily, and its product is handled through a Kraetzer Preparator. A considerable portion of the lumber is subsequently kiln-dried and put into oak flooring. The product, as represented by the specimens sent this office, is as fine an oak flooring product as has ever been produced. Manager H. W. Coles of this concern has adopted the brand of "Forked-Leaf White Oak" for his product, which will go to the trade under this name.

Miss Frances E. Hayden, daughter of Mr. and Mrs. Harvey S. Hayden, Chicago, was married on Wednesday, Oct. 8, to Carl Gardner Leigh of Chicago. Mr. Hayden is of the Hayden & Westcott Lumber Company, Railway Exchange, Chicago, and prominent in lumber affairs of the city. The marriage took place at the Hayden residence, 1706 E. 56th street, the Rev. Frank S. Hayden of Jacksonville, Fla., uncle of the bride, officiating. Mr. Leigh is associated with his father in the Leigh Banana Case Company, Masonic Temple, Chicago. This concern has a monopoly in the manufacture of the patented case for safe shipment of bananas. It has extensive veneering and box and case factories at various points and has a practical monopoly of this trade.

A large buyer advises the Record that he is in the market for a considerable quantity of three-inch sap gum and three-inch soft maple. Would prefer Kraetzer-cured product. Anyone interested in this requisition can have the address on application to this publication.

N. A. Gladding of E. C. Atkins & Co., Inc., Indianapolis, Ind., was in the city on Oct. 1 and made an appreciated visit to the offices of HARDWOOD RECORD.

J. C. Knox, secretary of the Michigan Hardwood Manufacturers' Association, Cadillac, Mich., was one of the prominent visitors to this city last week.

W. W. Dings, secretary of the Garetson-Greason Lumber Company, St. Louis, called at HARDWOOD RECORD offices on Oct. 3.

R. S. Kellogg, secretary of the Northern Hemlock & Hardwood Manufacturers' Association, Wausau, Wis., paid HARDWOOD RECORD an appreciated visit on Oct. 4.

E. Bartholomew of John B. Ransom & Co., Nashville, Tenn., spent several days of last week on one of his periodical business trips to Chicago and surrounding markets.

Chas. C. Boyd, president of Chas. C. Boyd & Co., Cincinnati, was with the local trade for several days last week on business.

M. L. Pease of the Galloway-Pease Company, Poplar Bluff, Mo., made a business trip of several days' duration to Chicago last week.

J. H. Faust of J. H. Faust & Co., Paducah, Ky., spent a few days recently with the local trade.

NEW YORK

Local members of the Concatenated Order of Hoo-Hoo are offering congratulations to E. H. Lewis, Vicegerent for this District, who was elected to a place on the Supreme Nine at the recent convention in St. Louis. Mr. Lewis has just returned from a trip to Seattle in the interest of business, visiting the headquarters and operations of the E. H. Lewis Lumber Company, of which he is president.

M. M. Erb, of Connersville, Ind., representing the Case-Fowler Lumber Company, sailed from New York on the steamship Imperator on Sept. 20. The trip abroad is chiefly in the interest of business and Mr. Erb will visit all the principal markets in England and on the continent. J. H. MacKelduff, who represents the company in the eastern territory, spent a few days with Mr. Erb before the latter sailed.

G. J. McDonald has again taken up the management of the local office of the Louisiana Red Cypress Company of New Orleans, La. Mr. McDonald was their representative here for three years up to last spring and before coming to New York was for ten years connected with the principals of the Louisiana Red Cypress Company in several capacities.

Announcement was made from the office of the state engineer that a barge terminal would be erected in Newtown Creek section of the Metropolitan district. The project was favored by the commercial and trade organizations of the Eastern District of Brooklyn and also of the Borough of Queens.

S. A. Hurlburt, who represents F. W. Whiteman, the Philadelphia wholesaler of northern hardwoods, was a recent visitor in the Metropolitan district. He had just come from Canada where he made several trips in the interest of business.

Sam E. Barr, popular hardwood wholesaler, is in the West on a business trip.

Schundler & Co., wholesalers of Pacific coast lumber and shingles, has been petitioned into bankruptcy by attorneys representing three creditors. Liabilities are said to total $232,000, with estimated assets of $40,000. The business was started in 1909 with Hans O. and Fritz E. Schundler as principals.

The appeal from the decision in the case of the government against the Eastern States Retail Lumber Dealers' Association is set for argument before the Supreme Court at Washington on Oct. 14. Atwater & Cruikshank, New York attorneys, will appear for the association and E. Carroll Todd will be heard for the government.

Schedules in bankruptcy of the Stanton Lumber Company of 52 Stanton street, show liabilities $6,382 and assets $3,923.

A petition in bankruptcy has been filed against the Chichester Bros. Chair Company, manufacturers of chairs, at Poughkeepsie. It was alleged that the company admitted in writing inability to pay its debts, and a constable has levied on its property. Liabilities are $4,000 and assets $1,000.

BUFFALO

The southern mills of the Standard Hardwood Lumber Company are working actively on oak and chestnut and shipments from the Cumberland river section will be made within the next few weeks.

Davenport & Ridley report a fair amount of business in hardwoods. The yard has been getting in stocks of maple and oak lately, much of it being shipped out immediately.

Elmer J. Sturm of Miller, Sturm & Miller, has been making an eastern trip of a week on business. The office reports a fair demand for hardwoods, chiefly plain oak.

Blakeslee, Perrin & Darling say their stock is moving steadily and evenly this fall. The prospect of good mixed-car business this fall is being counted on, and thus far such trade has been good.

James A. White has fully recovered from his recent attack of ptomaine poisoning and is now able to look after the White interests both in this market and in Michigan.

R. D. McLean left late last month for a month's vacation in Cuba and the West Indies. The McLean yard at St. Bernard, near Cincinnati, is being stocked with a good assortment of hardwoods this fall.

C. M. Carrier, who spent the summer in Buffalo, has gone back to Florida, where he has considerable undeveloped lumber interests which he expects to open up this winter.

Jackson & Tindle are cutting out a good deal of hardwood lumber, as well as hemlock, at their Michigan operations, and report that it is being shipped out as fast as in condition. Prices remain satisfactory.

Taylor & Crate are still objecting to the handling of Michigan hardwoods by lake, on account of the price being higher there than here. It is not expected that lumber will be placed in the Black Rock yard until spring.

Anthony Miller reports some improvement in the hardwood demand, but it is not yet so brisk as it might be. A fair amount of oak and other woods is being sold.

September 27 was a great day at the Automobile clubhouse. President M. M. Wall, A. W. Kreinbeder and O. E. Yeager were officials of the sports at the annual gymkhana on the above date and a large number of contestants were entered in the different events.

F. M. Sullivan, I. N. Stewart, C. W. Betts and Alfred Swanson were out hunting pheasants in Central New York late last month and tramped over a large part of Ontario County in the search of game. They brought back a number of pheasants and report a very pleasant excursion.

PHILADELPHIA

William Lincoln of the Lincoln Furniture Company says that he has been uninterruptedly busy up to date.

William P. Shearer of Samuel H. Shearer & Son reports good out-of-town orders, but local trading slow to materialize. Mr. Shearer has just returned from Atkinson, N. C., where they are erecting a new planing mill. The old one was recently destroyed by fire.

Harry R. Humphreys of the Hadentine Lumber Company says that company has recently acquired about 10,000,000 feet of hemlock, spruce and hardwood, which contains some of the best stuff ever placed on the market and which has been moving very fast. The company will hold its annual meeting next week at which its books will show a copious year's business. It is renovating its offices at Third and Market streets, Camden, N. J.

Isaac Dufield Harbert, seventy-five years old, a retired lumberman, died recently. His father, Charles Harbert, in 1824 organized the lumber firm known as Harbert-Russell Company. Isaac Dufield Harbert entered the business at an early age, retiring more than twenty years ago.

J. D. Este of the Charles Este Company says, although business generally is reported quiet, his company has no reason to complain, as it has been getting some very desirable orders right along.

C. C. Coolbaugh & Sons Company reports a subdued local trading. Its warehouse and out-of-town business, however, has been more satisfactory.

E. B. Humphreys of H. Humphreys & Co., Camden, N. J., testifies to a slight increase in business during the last few weeks, but buying is mostly on the hand-to-mouth order.

Major A. T. Goodman, assistant secretary of the Lumbermen's Exchange, from Apr. 16, 1892, to Apr. 20, 1898, when he was made secretary, from which office he resigned Aug. 30, 1904, died at his home, Ridley Park, Pa., on Sept. 20. He was eighty-one years old.

N. B. Gaskill & Sons, Incorporated, is the latest concern to enter the lumber field. The company is composed of Nathan B. Gaskill, recently with William Whitmer & Sons, Inc., and his sons, Edward and Frank Gaskill. They have opened offices at 832 Drexel building.

William F. Wagner of the Pooley Furniture Company says his plant has been running full capacity right along and orders are multiplying. He is optimistic as to outlook.

The Philadelphia Lumbermen's Golf Club's monthly game is scheduled to be played on the links of the Spring Haven Country Club on Oct. 21, when it will be the guest of Joseph P. Comegys.

Frederick S. Underhill of Wistar, Underhill & Nixon says business is holding up fairly well, considering the tariff and currency disputation in congress. The market he reports a little steadier of late.

J. M. Maris of the Maris & De Witt Lumber Company has just returned from a western trip, where he has been enjoying the wonderful scenery in and about Colorado since June. He reports a slight betterment in trading during the last fortnight. His son, Arthur McIlvain Maris, who was a passenger on the train which was wrecked near New Haven, Conn., is steadily improving.

Ellis K. Guilford, a well-known and much liked young salesman of Wistar, Underhill & Nixon, while out in a thunderstorm recently received a shock of electricity which so shattered his nerves as to necessitate special treatment in the Johns Hopkins Hospital, Baltimore, Md. His friends will be glad to learn that he is recovering fast and will soon be able to cover his territory.

PITTSBURGH

The Lumbermen's Club of Pittsburgh of which E. M. Diebold is president, will organize its fall campaign next week at a big luncheon to be held at the Hotel Annex. This is likely to be one of the strictly live organizations of greater Pittsburgh.

The state of Ohio and especially the Western Reserve is sorrowing much over the fact that farmers in Geauga and Portage counties are selling off their beautiful groves of maple trees. This will take away from Ohio its prestige as the second state in the Union in the manufacture of maple sweets, Vermont only leading. Prices which the farmers are offered for these maple trees are too tempting to be resisted longer.

E. V. Babcock of E. V. Babcock & Co. is trying hard to get out of Pittsburgh councils. He resigned last summer but owing to the fact that he is recognized as one of the best councilmen Pittsburgh ever had, his colleagues refuse to release him.

J. N. Woollett, president of the Aberdeen Lumber Company, visited the Cincinnati and Grand Rapids markets lately and found business rather slow. As a rule purchasing agents are not buying much beyond their immediate needs on orders.

The Youngstown Barrel & Cooperage Company has been organized at Youngstown, O., with a capital of $10,000 by O. H. Altschuler and others of that city as a manufacturing concern.

The Foster Lumber Company is now running fourteen mills in western Pennsylvania and eastern Ohio cutting hardwoods, chiefly oak. It reports a splendid trade with the railroads and construction companies.

I. F. Balsley of the Balsley & McCracken Company is feeling mighty good over some nice hardwood orders that have lately come its way. The company is just finishing its first year in business and is well pleased with the results.

H. E. Ast of the Mutual Lumber Company says that present hardwood business of the company is the best it has been since it started. He is pulling down some good Canadian orders as well as getting a nice line of manufacturing trade.

The Duquesne Lumber Company reports a considerable gain over August and early September business. Sales Manager G. C. Adams spent five weeks in the eastern markets lately.

Joseph J. Linehan is having good success this fall marketing the splendid stocks of the Mowbray & Robinson Company. He has been working the Ohio trade most of late.

BOSTON

A fire on Brown's Wharf, Portland, Me., recently resulted in a $10,000 loss to the Portland Cooperage Company and an estimated loss of about $5,000 to the Hilton-Dodge Lumber Company.

The Wm. E. Bent Co., Springfield, Mass., has recently been incorporated with a capital stock of $10,000. William E. Bent is president, Bernhard Radding, treasurer and J. G. Gottesman, is a director of the new company. Mr. Bent is well-known as a lumberman in Springfield. He was for a number of years connected with the Elm City Lumber Company of New Haven, Conn., but more recently of the firm of Smith & Bent, wholesalers. The new company has taken two floors in the new building at 55 Sharon street, Springfield, and will carry a full stock of inside finish of all kinds. They will also carry a line of flooring.

The exporting of lumber from Boston has been quite active during the past few weeks. As high as $11 a thousand fect has been paid for freight. Five ships have been loading at the Mystic Docks, Charlestown, which is the largest number at one time in a long time.

Plans are being made by Boston shipping interests for direct service between Boston and the Pacific Coast via the Panama Canal. The Harper Transportation Company which has a fleet of vessels, has made arrangements for two steamers to run from Boston to San Francisco and Seattle. The company expects to secure good lumber freights for its return trips from the Pacific.

A. L. Brooks & Co., Lowell, Mass., have been incorporated with a capital stock of $60,000 to deal in lumber. The incorporators are A. B. Woodworth, Artemas B. Woodworth and A. J. Markland.

The M. K. Smith Company, Worcester, Mass., has been incorporated with a capital stock of $25,000 to deal in lumber. The incorporators are Malcolm K. Smith, Helena Mahoney.

The Carlos Ruggles Lumber Company, Springfield, Mass., has been incorporated with a capital stock of $100,000 by Carlos Ruggles, C. B. Martin and Mary A. Ruggles.

The Chapin-Holbrook Lumber Co., Springfield, Mass., has been incorporated with a capital stock of $25,000 by Fred A. Holbrook, George D. Chapin and Clinton E. Bill.

BALTIMORE

The steamer Templemore of the Johnston Line, which was burned at sea on her last trip from Baltimore to Liverpool, carried a considerable lot of lumber and other wood products. The shipments included 129,037 feet of oak planks, 20,000 feet of walnut lumber, 475 bundles of box shooks, 235 packages of desks and parts of desks, 1,593 bundles of handles, one and a half cars of staves and 277 crates of tables. The entire cargo was valued at upwards of $600,000, the value of the vessel bringing the total loss above a million dollars. The Arcadia brought the crew of the Templemore back to Baltimore, which port they had left the week before. The Templemore was built for the Baltimore trade and has taken out large quantities of lumber during her career.

A meeting was held here last Thursday under the auspices of the Board of Trade, with which the Baltimore Lumber Exchange is affiliated, when the advisability of arranging an exposition of products designed to demonstrate the resources of Maryland in connection with the celebration of the Star Spangled Banner Centennial next September was discussed. The exposition is to be gotten up by the various industries and trades, and it is in contemplation to have the lumber industry represented. The idea would be to show strikingly the wealth of the state in merchantable timber and to put on display the product of woodworking factories. What the precise character of the exposition shall be has not yet been determined, but the display, if decided upon, will be housed at the Fifth Regiment Armory, which offers a large floor space. The representatives of the Lumber Exchange in the Board of Trade are Theodore Mottu of Theodore Mottu & Co., president; Lewis Dill of Lewis Dill & Co., and Ridgeway Merryman.

John L. Alcock of John L. Alcock & Co., the well-known hardwood exporters with offices at Baltimore and Gay streets, sailed for Europe on Sept. 23 from New York aboard the Kaiser Wilhelm II of the North German Lloyd, and is expected to be away about six weeks. He will visit various points on the Continent and then cross over to England, getting in touch with lumber trade conditions there. Much of his time will be devoted to sight-seeing. Mrs. Alcock accompanied him.

COLUMBUS

The report of the Columbus building inspector for the month of September shows that 257 permits were issued having an estimated valuation of $473,195 as compared with 236 permits and a valuation of $513,625 in September of the previous year. Since the first of the year the department has issued $3,303 permits of a valuation of $4,087,075, as com-

pared with 2,015 permits and a valuation of $3,927,860 in the corresponding period last year.

The Youngstown Barrel and Cooperage Company of Youngstown, O., has been incorporated with a capital of $10,000 to make barrels, etc. The incorporators are Oscar H. Altschuler, Ben M. Levitt, Edward Altschuler, Joseph Levitt and F. Levitt.

The band mill of the Norwalk Hardwood Company was destroyed by fire recently entailing a loss of $5,500 of which a portion was covered by insurance. It is announced the mill will be rebuilt at some other place.

H. E. Smith has purchased the sawmill interests of E. Cryder in the firm of McKenzie & Cryder at Ashley, Ohio.

Lumbermen of Columbus are interested in the membership campaign of the Columbus Chamber of Commerce which is seeking to secure a membership roll of 2,000. A number of lumber dealers and jobbers have been on the soliciting teams.

Steps will probably be taken soon to disband the Ohio Lumbermen's Credit Association which has had headquarters in Columbus and which is composed of lumber dealers in the larger cities of the state. The organization was brought about to secure the passage of a better mechanics' lien law, which has been accomplished. Unless some other movement of that sort comes up, the association will be discontinued soon.

After almost two months' operation of the new mechanics lien law in Ohio, general satisfaction over the law is expressed. About the only complaint comes from the contractor. Some owners whose time is limited are placed at an inconvenience in watching the progress of buildings but in such cases their banks or building and loan associations have taken matters off their hands.

John T. Dunnick, receiver for the Jobson Lumber Company of Columbus, O., reported to the court that the liabilities were $46,459.93 and that he had on hand more than $10,000 in cash collected. He sets aside $5,000 to satisfy a possible judgment in a personal injury suit and recommended the payment of a 10 per cent dividend which was ordered by the court.

W. M. Ritter, head of the large hardwood manufacturing corporation bearing his name, has returned from his annual trip to England and the Continent. While there he visited the branches of the company located at Liverpool and London. He says there is quite an improvement in conditions in the foreign lumber market.

W. B. Sissons, sales manager of the Sowers-Leach Lumber Company, has returned from a business trip through the lumber sections of the South.

TOLEDO

John M. Skinner, president of the Skinner Bending Company and of the Toledo Wheelbarrow Company, died Thursday, Oct. 2, at the family residence on Broadway, from a complication of diseases. Mr. Skinner was aged sixty-eight years and leaves a wife, a son and two daughters. Mr. Skinner has been in failing health for the past two years and with his wife made a trip to Alaska hoping for improvement. Last March he went to Panama with his wife, after which the family camped in the Adirondacks. Two weeks ago Mr. Skinner's condition became so serious that it was decided to bring him home, since which time he has rapidly failed in health. Mr. Skinner has been identified with the bending business for many years beginning his career at Erie, Pa., with the Fink Bending Company. He came to Toledo in 1884 and formed a partnership with the Brigham Lamson Bending Company, which later became the Lamson-Skinner Bending Company, and finally after the death of Mr. Lamson, the Skinner Bending Company. Until recently Mr. Skinner was also president of the Buckeye Furniture Company. It is probable that his position as president of the Skinner Bending Company will be passed on to his son, Claire V. Skinner, when the directors' meeting is held.

The Trout Lake Lumber Company is the name of a newly incorporated concern of Toledo, capitalized at $10,000. The concern will develop lumber interests in Michigan.

The Toledo Bending Company reports business a trifle slow. While this is naturally an off season, business is declared to be a little below normal. A good many inquiries have been coming in recently, however, which presages better business a little later.

W. S. Booth of the Booth Column Company has just returned from a motor trip to Detroit, where he went to investigate conditions. Mr. Booth came back with his pockets full of orders and declares that Detroit is in the midst of a building boom, thousands of residences now being under construction in that city. This is also true of Toledo, where building business has been far above normal for the past two years. Mr. Booth states that his factory is running full time and full capacity with orders still coming in from all sections of the country. A little lull for a week or two has made it possible to get orders pretty well cleaned up.

The Toledo Carriage Woodworking Company reports business fair with the factory running full time and capacity.

The Keasy Pulley Company reports business good with a splendid line of orders coming in from all over the country. The factory is running at capacity.

A $150,000 fire believed to have been of incendiary origin begun at New Straitsville, O., in the furniture establishment of C. Essex. The entire town was threatened and the state fire marshal's department is looking up the affair.

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Manufacturer of

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Also ask for list of users.

INDIANAPOLIS

The Imperial Hoop Company, Laporte, has gone out of business.

Scott P. Matthews of the South Arkansas Lumber Company is home after a Michigan trip.

Building operations in the city last month aggregated $675,504 as compared with $1,000,540 in September, 1912. There was a gain in all kinds of frame construction last month, while brick and fireproof construction showed a marked decrease.

With an authorized capitalization of $7,000 the Federal Wood Products Company has been organized and incorporated at South Bend to do a woodworking business. The incorporators are William F. Blake, W. W. Blake and E. R. Blake.

Carl Moeller, Fred L. Palmer and Otto F. Moeller have organized the New Cabinet Company here to manufacture kitchen cabinets and furniture. The company has been incorporated with an authorized capitalization of $150,000.

James W. Wheeler died at his home in Noblesville, Sept. 29, after a month's illness. He was seventy years old and had large timber interests in Indiana, Arkansas and Tennessee. He is survived by eight children, two of them, Leonard Wheeler of Memphis, Tenn., and A. G. Wheeler of Benton, Ark., are engaged in the lumber business.

Stanley L. Wolfe, a special representative of the United States Forest Service, has been in the city interviewing furniture manufacturers on the methods and materials used by them, giving special attention to manufacturers of veneered furniture.

Thomas D. Stevenson, vice-president of the concern, recently filed suit asking that a receiver be appointed for the Decco Manufacturing Company, manufacturers of veneer panels and interior hardwood trim. The company is embarrassed temporarily by lack of working capital. Its assets are estimated at $30,000 and liabilities at $11,000. Bert McBride, president of the Security Trust Company, has been named as receiver.

The J. A. Fay and Egan Company, manufacturer of woodworking machinery, now located in Cincinnati, is negotiating for a factory site in Beech Grove, a suburb southeast of Indianapolis. It has submitted a proposition to the Beech Grove Improvement Company that it will locate in Beech Grove in return for a sixty-acre factory site and $170,000 in cash. It is probable the improvement company will endeavor to sell 566 lots in Beech Grove at $300 each to raise the subsidy.

NASHVILLE

The Secretary of State has granted a charter to the Devil's Den Lumber Company of Knox County. The company will have headquarters in Knoxville, and has an authorized capital stock of $100,000. F. S. Chapman, R. S. Young, W. Donaldson, Sam E. Young, Jr., and George E. Bell are the incorporators.

Building operations in Nashville for September showed a falling off, compared with the same month last year. Permits were issued last month for improvements to cost $49,930 against $84,144 for the corresponding month of 1912.

Four poplar trees and two oaks on the farm of S. W. Warfield, in Maury County, near Columbia, were sold to C. C. Morgan, a Columbia manufacturer, for $525. These were magnificent specimens, being four or five feet in diameter at the base of the trunks.

The Tennessee Hardwood Lumber Company, of which Thomas Johnson is president, has increased its authorized capital stock from $50,000 to $60,000. The company recently absorbed the Althauser Webster Weaver Company, and the increase in capital stock was made in order to finance the consolidation. The company has been operating on a broad scope since taking over the Althauser Webster Weaver Company.

A sawmill belonging to S. V. Lidwell, ten miles east of Lawrenceburg, was burned, causing a loss of $600, with no insurance.

Frank Paxton of Kansas City has been visiting in Nashville, looking over the situation in the interest of his company.

The first meeting of the Nashville Lumbermen's Club since the summer season was held this week, with a good attendance. A large part of the session was devoted to discussion of trade conditions, and practically all of the dealers reported a business for September as large or larger than for the same month of last year. The sentiment seemed to be that the lumbermen have no ground for complaint.

An invitation from the Louisville Hardwood Club for the local club to visit Louisville was accepted. The local club will spend Oct. 14 in Louisville, chartering a special car for the trip. Last fall the Louisville club visited Nashville, bringing them into closer touch with local lumbermen. The local club is anticipating a fine trip.

MEMPHIS

The Fordyce Manufacturing & Ice Company, at Fordyce, Ark., has changed the location of its mill from a site on the Cotton Belt to one on the Rock Island system. In making this change in location the company is materially increasing the capacity of the plant which will in future amount to 30,000 feet per day. Oak, ash, gum and hickory will be the principal products.

The Memphis Freight Bureau has secured a reduction on shipments of lumber from points in Mississippi and Louisiana to Memphis. The reduction averages from one to two cents per hundred pounds.

The plant of the Salle & Ray Say Mill Company, at Montrose, Ark., will be open for operation in a few days.

Building operations in Memphis during September involved a total of $288,555. This is a rather sharp decrease as compared with the corresponding month last [illegible] but building operations at the present time [illegible] and there are some important projects, permits

Bluestone Land & Lumber Company
MANUFACTURERS
WEST VIRGINIA HARDWOODS
Soft White Pine, Oak, Poplar, Chestnut, Hemlock
Band Sawed Stock
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Wholesale Manufacturers and Exporters
RED GUM
SAP GUM
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ASH
PLAIN OAK
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SYCAMORE
All Grades and Thicknesses
We make a specialty of mixed cars of Sap and Red Gum, One-half to Two inches thick.

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Manufacturers Southern Hardwoods
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TIMBER ESTIMATES
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TOPOGRAPHICAL MAP, DETAIL ESTIMATES & WRITTEN REPORT
GARDNER & HOWE
ENGINEERS
Clarence W. Griffith Department Manager, Porter Building. Memphis, Tenn.

The Mossman Lumber Co., Inc.
Manufacturers
plain and quartered red and white oak, ash, gum and poplar.
ALSO FULLY EQUIPT DIMENSION PLANT
Memphis, - - Tenn.

for which will have to be taken out in the near future. Building materials of all kinds, including interior finish, are in active demand.

It is expected that the big shipment of mahogany logs recently ordered by the Memphis Veneer & Lumber Company will soon reach New Orleans and that the timber will be transported to Memphis without delay. The receipt of this shipment will mark the beginning of the manufacture of mahogany lumber in Memphis on a large scale. The shipment contains about one million feet. The Southern Hardwood Traffic Bureau, through an agreement with the officials of the Illinois Central system, has secured a comparatively low rate on mahogany timber from New Orleans to Memphis and this concession is responsible for undertaking the manufacture of mahogany lumber here on a big scale.

Business conditions throughout the Memphis territory are very satisfactory, indeed. Bank clearings for September were more than three million dollars in excess of any previous record in this city for this particular month. The amount of cotton sold was large and the prices received were abnormally high. This accounts for a considerable portion of the increase. It is noteworthy, however, that lumber interests have done a much larger business than during the corresponding month last year and that they have made substantial contributions to this excellent showing.

The new double band mill of Russe & Burgess, Inc., is nearing completion and will be in readiness for operation before the end of this month. The daily capacity will be from 50,000 to 60,000 feet, representing an increase of about fifty per cent over the old mill. W. H. Russe says that business is good and the outlook very satisfactory.

R. J. Darnell, Inc., has sent a check of $200 to the Memphis fire department and another check of $100 to the Salvage corps in token of appreciation of the splendid work done by both during the fire which some time ago destroyed the plant and much lumber and veneers belonging to this firm. The work of the Salvage corps in saving all the records of the company came in for especially favorable comment from Mr. Darnell and his associates.

LOUISVILLE

The Louisville & Nashville Railroad has filed a brief in the case of the complaint of the Norman Lumber Company and others of Louisville before the Interstate Commerce Commission, and a decision in the case will be had in the near future. The complaint involves bridge tolls across the Ohio river and the general alignment of rates into and out of Louisville.

T. M. Brown of the W. P. Brown & Sons Lumber Company is in the East attending the world's series. Mr. Brown is probably the champion baseball fan of Louisville, and seldom misses a game during the regular American Association season. Besides this, he takes in a good many major league games during the summer, and hasn't missed the world's series in a good many years. It is said that baseball is Mr. Brown's only recreation and that when he is not thinking about the national pastime he is considering the question of making and selling hardwood lumber.

Upchurch & Foster, Whitley City, Ky., have purchased the business of the Whitley City Supply Company, handling lumber, staves, crossties, etc., besides conducting a store.

The Yosemite Singletree Company has been formed at Middleburg, Ky., with $3,000 capital stock by R. B. and L. F. Young and Frank Napier.

The Interstate Commerce Commission will have a hearing in Louisville in the matter of the switching regulations of the Louisville & Nashville Oct. 28. The board of trade, with the backing of many lumbermen and other businesses, complained that the road would not switch competitive business.

The Wood-Mosaic Company expects to have its Highland Park mill ready for operation by Dec. 1. The New Albany flooring plant and veneer mill will not be completed for several months. The buildings will be chiefly of reinforced concrete construction.

Members of the Louisville Hardwood Club enjoyed a real old-fashioned country dinner at the home of P. G. Booker, president of the Booker-Cecil Company, recently. Mr. Booker celebrated his return to health after a long illness of typhoid fever by entertaining the members of the organization at his home, Nitta Yuma, near Harrod's Creek. The repast was of the sort that nobody can overlook, and it was probably enjoyed more than any of the other recent dinners of the club.

The Louisville Hardwood Club will entertain the Nashville Lumbermen's Club Oct. 14, returning the hospitality extended by the Tennesseans early last spring when the Louisville men visited the Southern city and inspected the yards and mills there. It is expected that over a score of Nashville lumbermen will be in Louisville, and it is hoped to make the occasion a memorably enjoyable one.

ST. LOUIS

Building operations in St. Louis for last month almost equalled those during the corresponding month last year, when an unusually good showing was made. Last month 857 permits were issued for buildings and alterations to cost $1,180,809. In September, 1912, there were 748 permits to cost $1,248,763. Several permits for large buildings to cost considerable have already been issued during this month and the prospects are that the month will make a good showing.

Receipts of lumber by rail at St. Louis as reported by the Merchants Exchange during September were 17,531 cars. In September, 1912, the receipts were 16,347 cars, showing a gain in September this year of 1,184

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High Quality—Prompt Delivery

WE WANT TO MOVE AT ONCE

10 cars 4/4 No. 1 Com. Basswood
6 cars 4/4 No. 2 Com. Basswood
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Manufacturers of
Genuine Forked-Leaf White Oak
Red and Sap Gum
Red Oak and Ash

¶ We offer to the trade a remarkably SUPERIOR lumber product.

¶ Our TIMBER is virgin forest growth of the highest type.

¶ Our MILLS are new and produce accurately manufactured stock.

¶ Our LUMBER is all KRAETZER-CURED—treated with steam under pressure directly from the saw—insuring quick drying to light weight, freedom from seasoning defects and stick-marking, splits and stain.

¶ Kraetzer-cured lumber will "stay where you put it."

¶ Dry kiln and oak flooring plant in connection.

¶ We solicit the inquiries and orders of critical and discriminating buyers.

¶ For straight cars of Yellow Pine, or mixed cars with Oak Flooring, write LONG-BELL LUMBER COMPANY, Kansas City, Mo.

cars. Shipments of lumber by rail last month were 12,762 cars. A year ago the shipments were 11,168, showing a gain this September of 1,594 cars. There were no shipments or receipts of lumber by river either this year or last.

Joseph O'Neil, secretary of the O'Neil Lumber Company, St. Louis, and Miss Helene Wrape, daughter of Henry Wrape of the Henry Wrape Company, stave manufacturer, were married Wednesday, Oct. 1, and have gone to Washington, D. C., and thence on an eastern motor tour.

Thomas E. Powe, president of the Thomas E. Powe Lumber Company, returned last week from Waynesville, N. C., where he has been on his summer vacation. His wife and little daughter have been there all summer.

L. M. Borgess of the Steble & Hibbard Lumber Company has returned from a selling trip through Iowa and Minnesota. He reports business as fairly satisfactory with every prospect of being excellent before many weeks, as the majority of the retailers are short of stock and will have to buy soon.

CINCINNATI
Hardwood Manufacturers and Jobbers

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KILN DRIED OAK
AND OTHER HARDWOODS
are one of our many "specialties" which are so satisfactory to others. Why not you?
Might pay you to get in touch with us. It has others
THE M. B. FARRIN LUMBER CO.

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MANUFACTURERS HARDWOOD LUMBER
1739 EASTERN AVENUE

DAY LUMBER & COAL CO.
Mfrs. YELLOW POPLAR and WHITE OAK
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OAK, POPLAR, CHESTNUT
SUMMERS AND GEST STREETS

ARKANSAS

M. P. Welch of the American Handle Company, after spending some time in Hot Springs in an effort to regain his health, is now in Jonesboro convalescing. He has suffered a severe attack of fever and spent some time in a hospital at Jonesboro.

W. W. Halipeter of the Wisconsin Stave and Hoop Company, Memphis, Tenn., has completed arrangements for the establishment of a large plant at Blytheville, Ark.

Under the supervision of Francis Kiefer, supervisor of the Forest Service at Harrison, Ark., the United States Forest Bureau will sell 1,000,000 feet of white oak timber from the government reserves in Stone county, Arkansas.

The Mendenhall Stave Factory at Peach Orchard, Ark., has recently been completed and is now in operation.

L. C. Hausman has recently succeeded J. M. Chambers, resigned, as the Arkansas representative for the St. Louis Cooperage Company.

The H. D. Williams Cooperage Company of Leslie, Ark., which was closed down some months ago by reason of a fire damaging the plant to the extent of $150,000, has resumed operations.

A charter has recently been issued to the Meyers Stave and Manufacturing Company of Piggott, Ark. The concern is capitalized at $25,000, and has the following officers: J. M. Meyers, president; J. B. Meyers, vice president, and G. W. McWilliams, secretary and treasurer.

The stave department of the Graften Stave and Heading Company of Pocahontas, Ark., has been closed down for the past few weeks. The cause for ceasing operations was the oversupply of stock for the season's demands. The heading department of the plant is running on full force, and there is a ready demand for that stock. The Graften plant at Pocahontas is one of the largest of the kind in that section of the state.

After a final refusal of the proprietors of the heading factories at Paragould, Ark., to recognize the local Coopers' International Union, on Sept. 23, one hundred and fifty men walked out on a strike. The mills involved are the Pekin Manufacturing Company, the Henry Wrape Stave Company and J. F. Hasty & Sons Stave and Heading Company. The managers of the various factories have made no statements, other than the refusal to recognize the union. The plants are now operating with men who accept employment without union recognition.

On the night of Sept. 24, practically all the belts were stolen from the machinery at the plant of the Little Rock Handle Factory, and the factory was closed down on account thereof for some forty-eight hours. On the second day after the loss the belting was found by the detectives of the Little Rock police force. Two negroes had gone to the factory and appropriated the belts with the hope of being able to dispose of them for cash. It was through the dealer to whom they tried to sell the stolen property that the police found the guilty parties and the property. The plant has recently been taken over by the Berry Hartwell Handle Company and was reopened with a contract for 30,000 dozen handles.

The Black & Norton Axe Handle Factory of Brinkley was destroyed by fire on the morning of Oct. 4, the loss of $8,500 being partially covered by insurance.

The Shelton Handle Company will install a factory at Malvern, Ark. The company's plant at Bierne was recently destroyed by fire. The new plant at Malvern, which will replace the lost one, will employ about twenty men, and the management expects to have it in operation within sixty days.

MILWAUKEE

The Kiel Furniture Company of Milwaukee and Kiel, Wis., was one of the largest exhibitors of a fine display of furniture at the recent Annual Household Show in the Auditorium, Milwaukee. Local retailers in wood products were also exhibitors.

The Willow River Lumber Company, whose sawmill at New Richmond was totally destroyed recently with a loss of $75,000, of which $60,000 was covered by insurance, has purchased the plant of the North Wisconsin Lumber and Manufacturing Company at Hayward, from Edward Hines of Chicago. The Willow River Company will not rebuild the New Richmond plant, but will transfer its lumber manufacturing operations to Hayward. It is said to have a supply of timber in Bayfield and Ashland counties to run twenty years. The Hayward plant, including a water power and electric light plant, is said to have been sold for a price of $38,000

The Tomahawk Veneer and Box Company has been incorporated at Tomahawk, with a capital stock of $50,000. The incorporators are Rheinhard Meyer, proprietor of the Rheinhard Meyer Box and Veneer Company of Merrill, Max Meyer and Julius Gromol, for several years connected with the Merrill veneer works. The new concern will occupy the old No. 2 mill in which the Bradley company will cease operations Oct. 31. The planing mill will be enclosed and enlarged, necessary machinery installed, dry-kilns built, steaming tanks put in and work started in manufacturing high-grade veneer and cheese boxes. From 75 to 100 hands will be employed. The present sawmill will be replaced next spring to double the present capacity. The company plans to cut 2,500,000 feet of hardwood timber annually and will run the plant full time the year around.

The Medich Stain Extract and Altar Company has been incorporated at

Milwaukee with a capital of $100,000. The incorporators are C. J. Heiser, F. H. Berkker and S. H. Hirschbock.

The planing mill of William Townsend which was partly occupied by the Brittingham and Hixon Lumber Company, at Reedsburg, was completely destroyed by fire recently, probably due to defective wiring. Townsend sustained a loss of about $1,000, the insurance on which had only recently expired. The lumber company also suffered a complete loss of machinery, etc., covered fully, and will erect a new mill near its yard.

A deal has been closed whereby Patrick Gorman and son, Walter, have purchased six forties of hardwood and hemlock timber from Zobel Bros., of Ripon. The timber is located near Dunfield, in Lincoln county. The tract will be logged this winter, the contract having been let to Charles Revi. The logs will be hauled about a mile to the railroad tracks and shipped to Wausau.

The Rietbrock Land & Lumber Company of Athens has acquired the Winch interest in the heading mill at that place. Mr. Kernighan retains his interest in the plant and will be manager. The new owners will run the mill full time and furnish a steady market for bolts.

Lumbering activities in the vicinity of Bayfield have started for the winter and hundreds of men are being sent into the woods. The Wachsmuth Lumber Company has one camp of 100 men under Jack Furlot near Sand River, but jobbers for the company have started. Jerome Roy has 90 men near the settlement; five miles west of the city R. J. Nelson has sixty; Napoleon Radideau is working forty men on section 20, and Olof Anderson has opened a camp on Madeline with fifty men. George White, jobber for the Stearns Lumber Company, is finishing a contract near Squaw Bay and will soon move to Oak Island. The Sprague Lumber Company of Washburn has forty men working near Raspberry, and the Bell Lumber Company is operating a camp at Russell for the Ashland mill. The Schroeder Lumber Company is operating the camps on Presque Island, and George Green is making preparations for the usual logging for the Thompson & Fleith Lumber Company near Cornucopia. C. E. Morrill, a cruiser for the Wisconsin Veneer Company, of Rhinelander, is arranging for camps in the northern part of the township of Crandon where the veneer company will cut timber this winter. The Keith & Hiles logging railroad will probably be utilized to bring these logs to the main railroad line. C. W. McGee, of Shawano, is looking after several camps for his company. One has already been established at Dry Lake and another on the creek near Sherman's. Part of the logs cut will be hauled to the Pelican branch at Rocky's siding and the balance from Dry Lake to the Morse & Tradewell spur. Six million feet of logs will be put up by this firm during the winter.

Fred Itzin of Burlington has completed erecting the veneer mill at Hanson's spur, near Kennedy, which will manufacture veneer for the cases used by the Wisconsin Condensed Milk Company. The time to erect the mill and manufacture the first veneer required just two months.

W. B. Stanton, a wealthy retired lumberman of Marinette, was the victim of an unusual automobile accident recently. While driving his car he felt over the wheel, a victim of ptomaine poisoning. The auto went into the ditch and turned turtle, but Mr. Stanton escaped serious injury.

Rossiter H. Wilbur, a Waukesha lumberman, and Miss Ethel Hadfield were married Saturday afternoon, Oct. 4, Prof. Ganfield, of Carroll college, officiating. They will reside here, where Mr. Wilbur is a member of the Wilbur Lumber Company. He is a brother of Mayor Hawley W. Wilbur of Waukesha. The bride is the only daughter of Mrs. J. J. Hadfield, and is a graduate of the Milwaukee-Downer college.

A new board of directors and a change in the personnel of the officers of the Racine Manufacturing Company resulted from the meeting of the stockholders recently. The company, organized in 1902, manufactures automobile bodies. In 1909 the company suffered a serious loss by fire with practically no insurance. C. A. Hamilton was elected president and general manager; Charles F. Barndt, vice president and factory manager; F. J. Kidd, treasurer, and Harold Smith, secretary.

The stockholders of the Mellen Lumber Company, at Mellen, recently held the fifth annual meeting. The directors and officers were re-elected and the usual annual business was transacted. The company has had a successful year and prospects for the coming year are very bright.

The Appleton Commercial Club has practically completed negotiations with the Millard Hoop Manufacturing Company for the removal of the concern's plant from northern Michigan to Appleton.

The Oshkosh Excelsior Manufacturing Company, which conducts plants at Oshkosh and Neenah, Wis., is erecting a new plant at Maple Ridge, near Escanaba, Mich., where operations will be started in spring. The company has acquired a good supply of material, mostly poplar and basswood.

The Loomans Lumber Company of Waupun, Wis., secured the contract for furnishing the state of Wisconsin with the necessary lumber required in erecting the dairy barn at the state prison in Waupun. I. R. Rossman, for several years manager of the Yawkey-Crowley Lumber Company of Waupun, has purchased an interest in the Loomans concern and has become manager. D. J. Loomans will retire from active business.

The Fred Schubring Lumber Company, Wausau, has gone out of existence, having finished its operations, and consolidated with the Mohr-Stotzer Lumber Company, which has a mill at Holt. The new firm will be known as the Mohr Lumber Company and J. S. Griffith, formerly of Holt, will be manager. The company has large timber holdings in Marathon and adjoining counties.

EXCEPTIONAL

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If a good veneer cutter can manufacture fair quality veneers with antiquated machinery, what can he do when given the latest and most efficient equipment?

The Answer

is to be found in any of the stock produced at our new mill, which is the last word in modern equipment.

We have selected the finest logs on the market, our men are experienced and capable, the product speaks for itself.

See our samples and get prices.

Visit Our Plant

Any time you are in Chicago and want to see the most modern veneer plant in existence today, we will be glad to show you through our plant.

Fred W. Black Lumber Co.

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You Know Something About the Land of Last Supply

You know, of course, that the nearest source of adequate lumber supply are the forests of the west, the inter-mountain pines and the fir, spruce, cedar and hemlock of the Pacific Coast.

In a broad sense, we are at the beginning of an era of

Competitive Demand for Western Timber

Mills of the South are exhausting their supply and are seeking new locations.

Timber is disappearing from the market, but not so rapidly now as it will on a constantly increasing scale during the next decade. Every tract taken off the market decreases the supply and increases the desirability and value of those remaining.

The best go first. Investigate now.

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Triangle Brand
White Oak Flooring

Perfectly dried and worked

Made from our own timber from one boundary, insuring uniform color and texture; manufactured at our new hardwood flooring plant.

Our Specialty: Quarter-sawed White Oak Flooring
Thicknesses: 3/8" and 13/16" Standard Widths

Your Inquiries Solicited — Quick Shipments Guaranteed

YELLOW POPLAR LUMBER CO., Coal Grove, Ohio

Kentucky Lumber Company

MANUFACTURERS

POPLAR, PLAIN AND QUARTERED OAK, RED AND SAP GUM, ASH, CHESTNUT, BASSWOOD, HEMLOCK, WHITE PINE

Mills at
Burnside, Ky. Williamsburg, Ky.
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Sales Office
Cincinnati, O.

SAWYER GOODMAN CO.

MARINETTE, WIS.

Mixed Cars of Hardwood, Basswood, White Pine and Hemlock, Cedar Shingles and Posts

We make a specialty of White Pine Beveled Siding and White Pine Finish and Shop and Pattern Lumber

The Tegge Lumber Co.

High Grade
Northern and Southern
Hardwoods and Mahogany

Specialties
OAK, MAPLE, CYPRESS, POPLAR

Milwaukee, Wisconsin

The M. H. Spencer Lumber Company, Washburn, recently closed down after a successful run of about seven million feet of timber. The deep snow last winter hindered the company from getting enough logs out of the woods and for a time summer logging was carried on. However, not enough logs were brought to keep the mill running longer than up to this time.

The J. S. Stearns Lumber Company, Odanah, is making improvements along the bank of the Bad river by building a dyke for the protection of the Indians whose property lies along that part of the river. The high water in spring usually does considerable damage by washing away land from the banks.

Senator Isaac Stephenson, the prominent Marinette lumberman and at present United States Senator, who went into the Wisconsin and Michigan woods penniless, like many of the old lumber barons, and came out rich beyond the wildest dreams, is writing his memories. Starting as a cook in a lumber camp at $18 a month sixty-two years ago, Senator Stephenson, widely known as Uncle Ike, at over fourscore years, doesn't know how much money he has now and brags about his ignorance. He is always on the job in the Senate. In Marinette he owns a yacht, some automobiles, a couple of lumber factories, several paper mills and other plants and property in other sections of Wisconsin and northern Michigan.

Despite the protest of lumber dealers and building contractors, the common council committee on buildings and grounds killed the amendment to the building code which would hold off the ban on wooden shingle roofs outside of Milwaukee's fire district for two years. Alderman Greene championed the cause for the Milwaukee lumber dealers, who pointed out that they had a large stock of shingles on hand and would suffer a great loss if the ordinance would stand. The amendment would further make the clause not applicable until a suitable substitute has been found for wooden shingles. If the aldermen would have been alert at the time the building code ordinance was up before the common council, the latter argument would probably have had a good effect. Now that the ordinance is in effect insurance men and Chief Clancy of the fire department are working hard to keep the law in its original form. One strong argument against the use of wooden shingles is the fact that the fire underwriters are already preparing a schedule of reduced rates on the strength of the ordinance. The thousands of shingle roofs in the city will undoubtedly require a large quantity of shingles for patch work, which is allowable by the ordinance.

DETROIT

The Dwight Lumber Company has just completed the construction of a new warehouse, 60x80 feet in size, in which interior finish will be stored. Secretary John Lodge of the company reports that the hardwood flooring trade is in good shape and the Dwight factory is running full time.

The department of buildings reports for the first nine months of the year, ending Sept. 30 showed an expenditure of $23,593,780 in new building, or only $1,924,690 less than for the entire year ending Dec. 31, 1912. In comparison with the figures for a similar period in 1912 a gain of $2,603,400 is shown.

Detroit hardwood dealers have organized a club which will be devoted to both pleasure and the advancement of its members in a business way. An interesting program for the winter is being mapped out. George I. McClure is one of the leaders in the organization of the club.

The J. M. Clifford Lumber Company, exclusive dealers in hardwoods, have had a busy fortnight and are looking forward to a brisk fall and winter trade.

The Hardwood Market

CHICAGO

The trade in Chicago is but a reflection of the trade generally throughout the country at present, although the Chicago market is probably in as unsatisfactory a condition as is trade in any other big center. There has been considerable price cutting for some time in the local trade, which condition seems to have continued. Concessions are noted on most of the standard items of hardwood consumption, although there is by no means a panicky condition apparent.

The most favorable line of consumption at present at Chicago seems to be the box factories which are demanding a very good quantity of lumber. The furniture people continue to be in pretty good shape, but while they are buying they are not placing the large orders that the local trade would enjoy taking.

The building situation has probably improved slightly, and with it there is noted a fair condition in the interior finish business and a good trade in flooring.

Gum on the local market is not strong and does not seem to be picking up notably. Oak is still in the lead and is in about the same condition as prevailed two weeks ago. The veneer and fancy wood markets are satisfactory in Chicago.

On the whole, the local market is not over-cheerful as to present condi-

tion, but seems to be taking the situation philosophically and to be making the best of the present distress in anticipation of a resumption of better conditions when affairs at Washington have become settled definitely enough for the general businss element of the country to ascertain its real position.

NEW YORK

There is a firmer tone to the local hardwood market; inquiry is more general and the demand shows signs of increasing. As yet there are few buyers placing large orders, the improvement being in the number rather than the size of orders. This is taken as a hopeful sign and a freer buying period is looked for soon. The range of values keeps high and there are practically no concessions now being made. It is being realized that the market will not go to any lower range and that the tendency is upwards. Poplar in low grades and gum are very quiet at this time, but oak, ash, chestnut and birch are in good call.

BUFFALO

The demand for hardwoods holds steady and most yards are doing a fair business in mixed cars. This sort of business is likely to be good here this fall, as stocks are in excellent assortment and quick shipments can be made. Members of the trade state that stocks in the hands of consumers are very small and with the tariff bill a law it is expected that business will show a good deal of improvement. Prices are holding steady in all varieties of hardwoods, though not generally so high as some time ago.

More plain oak is selling than anything else, although those who handle birch as a specialty say there is a pretty good business in it this month. Maple is holding its own and there is a steady inquiry for flooring in that wood, as well as in oak and beech. Some dealers say they are now selling more chestnut than for some time. Both white and brown ash are in relatively good demand.

There has been no unusual scarcity of cars in this market as yet, but it is expected some shortage will be felt soon. Mill points will no doubt suffer from the usual lack of cars this fall. The local yards are well situated for getting cars and will not feel the scarcity as keenly as some other lines of business.

PHILADELPHIA

Notwithstanding the varying opinions as to the existing trade conditions generally, it is admitted that the hardwood situation causes no settled uneasiness, and that an undercurrent of optimism obtains everywhere as to the outlook. The recent strikes in several important commercial lines are on the way to satisfactory adjustment and with the exception of the prolonged tariff and currency agitation in congress, everything is favorable to an expanded business with the advent of cooler weather. The ship-building industries of this city are rushed with work and to their already busy shops has been added the construction of two large ferries for transport of passengers and freight cars from Key West to Cuba. An eight million dollar loan will be voted on at the November election, which money will be devoted to the building of subway and elevated roads, and new docks and other improvements in shipping quarters for the accommodation of new steamship lines en route for Europe or through the Panama Canal. Another important and extensive improvement contemplated is the eliminating of the street grade crossings in South Philadelphia, and the opening of the southern section of the shipping quarters to all railroads. The combined work which is being pushed forward by the reform mayor and his able staff has the heartiest endorsement of a committee of able merchants and financiers and means the materialization of work for thousands of artisans, mechanics and laborers, a prospect which brightens the horizon of the gloomiest pessimist.

Among the woods oak continues headliner, with maple and birch in the running; chestnut, ash and basswood are in fair demand. In fact, all hardwoods except poplar are running along in easy grooves, and even the low-grade poplar finds ready sale.

PITTSBURGH

The hardwood situation is altogether the brightest spot in the lumber market here. There is a splendid demand for oak. White oak never brought better prices or was more easily sold than at present. Lately some leading hardwood wholesalers here have gone to Canada, where they are getting fine orders from Canadian manufacturers for oak as well as for other good hardwoods. Chestnut is more in demand this month owing to the fact that window glass concerns are taking on more business. The coal mining trade in low-grade hardwood is the best ever. Good prices are being received for this lumber and the tendency is to make pretty large purchases. The yard trade in hardwoods is spotted and cannot be depended on to produce any very good business.

BOSTON

It has been rather difficult during the past two weeks to find a dealer in hardwood lumber who is wholly satisfied with the volume of demand for his wares. Generally at this time of the year there is more spirited buying upon the part of consuming manufacturers. This year the salesmen have

OAK BUYERS

"Increased timber supply makes us one of the largest oak producers in the country.

¶ Our white and red oak timber is of a quality that enables us to guarantee to properly meet your requirements for anything in this line. We can supply large quantities, running strongly to 14′ and 16′ lengths—a good proof of the character of the timber.

¶ We are ready to cut red or white, quartered or plain, 3/8″ to 8/4″, and will carry in stock a complete assortment of all thicknesses.

¶ All our lumber is made with the most perfect machinery obtainable—band saws used throughout our mills.

¶ We pride ourselves on the character of our edging, trimming and piling, which insures straight, cleanly-made lumber, uniformly dried.

¶ In these days of quick shipment you are interested in prompt delivery. Our extensive organization and facilities from the tree to your yard, place at your disposal the most perfect lumber delivery service in existence.

¶ We would like to explain further why we can please you, and if you are in the market for anything in southern hardwoods now, would appreciate your writing us today.

PAEPCKE LEICHT LUMBER COMPANY
GENERAL OFFICES CHICAGO, ILLINOIS

Kraetzer-cured LUMBER

TRADE MARK

¶ Kraetzer-Cured lumber is susceptible of being thoroughly air dried or kiln dried in less than one-half the time ordinarily required for seasoning unsteamed wood.

¶ Kraetzer-Cured lumber does not case-harden, check, end-split or stain, and dries without warping or buckling.

¶ Kraetzer-Cured lumber has a uniform tone of color. Its working qualities are greatly improved, and the beauty of the flake on quarter-sawed stock is enhanced.

¶ Kraetzer-Cured lumber dries out to materially less weight than unsteamed wood, ranging from 200 to 500 pounds per thousand feet.

¶ Kraetzer-Cured lumber will neither shrink nor swell, and the grain will not raise when water stains are employed in finishing.

¶ Kraetzer-Cured lumber is not impaired in strength or quality by the process.

¶ Kraetzer-Cured lumber eliminates all glue-joint troubles and "will stay where it is put."

¶ A list of manufacturers of Kraetzer-Cured lumber will be supplied on application.

Kraetzer-Cured Lumber is produced by the use of the Kraetzer Preparator, manufactured by

The Kraetzer Company
537 S. Dearborn St., CHICAGO

TRADE MARK

Kraetzer-cured LUMBER

to work hard to make satisfactory sales. Prices are high, which tends to make the average buyer think twice before entering the market for supplies much beyond his immediate needs. The competition from manufacturers of hardwood lumber who sell direct is making it harder all the time for the wholesale dealer, as several mills quote the wholesaler about the same price that they do the final consumer. The retail yards in this vicinity do not appear to be doing a great deal at present but some of the manufacturers who consume hardwood lumber are fairly busy. The chair manufacturers and the makers of interior finish are for the most part fairly busy and manufacturers of desks are making inquiries for stock.

Oak continues to be about as firm as anything on the list. Whitewood has not attracted a great amount of new business of late. Demand for chestnut has been fair. Veneers are in very good demand and plants appear to be busy in most instances.

BALTIMORE

While no changes of note are to be recorded in the hardwood trade, the tendency appears to be steadily toward better conditions. The manufacturers as well as wholesalers here report that their September business was larger than they had expected, and that the demand assumed far greater proportions than they had reason to look for earlier in the season. Many of the yardmen and consumers in the North were in a receptive mood for stocks and liberal orders were placed, much of the lumber going to replenish the assortments drawn upon before, but some additions to the stocks in hand were also made. According to the hardwood men, this distribution was effected without making any price concessions, the range of values remaining about the same as it has been, with the returns quite satisfactory for the most part and very few indications of weakness. In fact, it is to be questioned if any real sagging occurred, the inquiry for lumber being sufficiently active to absorb the output of the mills and keeping the situation in good shape.

Oak is holding its own, having eased off very little since early in the spring, and in various instances yielding returns which at least in part mark a return to the previous figures. Chestnut quotations are gradually working back to the spring returns and the calls for lumber are sufficiently numerous to take care of the production. No material accumulations are to be found at producing points, and the mills in many instances are kept running at capacity to meet the wants of their customers. It is much the same with gum, basswood, ash and other woods. Even poplar shows something like firmness, with prices almost back to where they were and every indication in prospect that any easing off which may have taken place during the quiet of summer will be made up before long. The lower grades of poplar have not responded to a degree that might be desired, but the undertone of the wood is appreciably steadier and the future holds out a promise that the stocks in hand will be taken care of without trouble.

The export situation, though still unsatisfactory, has made some progress toward a better state of affairs. The curtailment in the forwardings is proving beneficial to the trade, serving to reduce the holdings on the other side to an extent that tends to revive interest in stocks. The high freight rates to some of the foreign ports stand in the way of a marked recovery, absorbing, as they do, whatever advance the foreign buyers might be induced to pay. But with any lessening in the offers of freight the steamship lines will be forced to offer inducements, and the increased competition between the North German Lloyd and the Hamburg-American Line in the steerage passenger business is likely to open the door to competition in the freight carrier business, which may go beyond the companies originally involved and bring about a general lowering of charges.

COLUMBUS

Steadiness characterized the hardwood market in Columbus and Central Ohio during the past fortnight. There has been a fair demand for all grades and varieties and prices have been well maintained on every hand. The levels which have prevailed for the past few months have been maintained and no weakness of consequence is reported. The tone of the market is satisfactory and the outlook for the future believed to be good.

Demand is noted from both retailers and factories. Yards are only buying what they desire for immediate wants as they are loth to accumulate stocks at this time. Factories, especially furniture and implement concerns, are the best purchasers. Factories are also following the policy of buying only what they can use in the near future. Automobile factories are buying pretty well.

Building operations are still active and will be until the bad weather sets in. This fact is expected to maintain a good demand and preparations are being made for an active season during the winter. Dry stocks are not plentiful and this is one of the good phases of the trade. Car shortage is interfering with shipments and some inconvenience is reported.

Quartered oak is strong and the demand is good. There is also a good demand for plain oak, both red and white. Chestnut is one of the strong points in the market. Sound wormy especially is strong. Poplar is becoming stronger and the large stocks are being gradually decreased. Basswood is moving well and the same is true of ash. Other hardwoods are holding up firmly.

TOLEDO

Hardwood business continues good. Orders are mostly for immediate use and not much speculative buying is indulged in; but for all that, buying is quite free. Building continues active in Toledo, making a good demand from the building trades, while factories are running better than usual and both furniture and vehicle concerns require large amounts of hardwoods. Red gum is encroaching largely into the domains of other materials, being used heavily as a substitute for the higher grade lumber. This lumber is holding its own and growing in popularity in this section. Plain oak is leading the demand on the local market, holding up well. The quartered oak is not much in demand in this section, but there is a strong demand for ash, which is growing scarce and consequently high in price. The tariff has not affected the lumber market in this section and business in all lines is exceptionally good. Factories are even better than usual at this season of the year, building of all kinds is active, and even the retail merchants are enjoying an exceptional trade.

INDIANAPOLIS

Activity among furniture factories and a resumption of building activity has caused some increase in the demand for hardwoods during the last two weeks. The situation is now more encouraging than it has been for several weeks.

The trade, however, is now feeling the effects of the car shortage. The shortage is in the South and West, making it difficult to obtain shipments in this vicinity. There is also a heavy movement of coal in this territory and the Indiana grain crop will begin moving shortly.

Hardwood prices are remaining firm. Many dealers are sending in inquiries, having held off heavy buying as long as possible.

MEMPHIS

The hardwood market continues to broaden and the present volume of business is quite encouraging. Inquiries are being received in large enough volume to suggest that there are some heavy requirements to be met in the near future. This fact, together with the orders already booked, is responsible for the increased manufacturing operations evident on almost every hand. Manufacturers and wholesalers alike feel that it is up to them to be in position to meet the needs of the consumptive trade and they are doing all they can to get their stock lists in satisfactory shape. There is no particular surplus of hardwood lumber unless it be in red gum which has been comparatively slow for some time. The demand for ash is very good and offerings are limited. A number of prominent manufacturers are selling their output in this lumber green from the saw. Prices are well maintained. There is a good demand for oak in all grades with the exception of some descriptions of plain white in the upper grades. The demand is good and the movement is satisfactory, taking the oak list as a whole. There is no difficulty found in disposing of all the low-grade gum offering and there is likewise a strong demand for the lower grades of cottonwood. The box factories are all running on full time and report the outlook bright for a large trade which in turn means large requirements in raw material. The upper grades of sap gum are in good request and are moving more freely than a short time ago. Red gum, however, is rather slow. Low-grade cypress is in good demand but above selects there is not much call at the moment, especially in stock thicker than one inch. There is little poplar offered in this market. Prices thereon, however, are well maintained. Export business in hardwoods continues good.

NASHVILLE

Business in the local hardwood market has shown some improvement since the first part of October, shippers and manufacturers reporting an increase in trade. There is probably an easier tone to prices, though the disposition of dealers seems to be to maintain values. Some lots have been sold at concessions. Oak and ash continue active sellers. Demand is mentioned for poplar, and some chestnut is being moved. The inquiries being received from buyers indicate that better business may be expected later in the fall. Conditions are healthy at local manufacturing plants, box, oak flooring and furniture factories being in operation in a normal manner.

LOUISVILLE

September was a satisfactory month with local hardwood concerns, and October is starting off equally well. The past month scored an improvement over the corresponding period of 1912, as well as the months immediately preceding, and though it probably will not take its place as one of the heaviest months of the year, it was well up to normal. Trade at present is likely to be affected by the fact that the new tariff law is in effect, though most lumbermen believe that the industries chiefly concerned have already discounted this factor. What effect the currency bill will have on general conditions can hardly be foretold, though the bankers are trying to make it plain to their customers that it will hurt business.

Quartered oak is probably the most active item on the hardwood stock-list at present, with plain oak also in good demand. Ash is moving steadily, and poplar is showing some improvement. Red gum is also more

Mahogany and Circassian Lumber & Veneers

¶ The largest assortment of finest figured Mahogany Logs, Lumber and Veneers in the country can be found at the Chicago plant of C. L. Willey.

¶ We are just in receipt of fifteen cars of remarkably superior Circassian Walnut Logs, large size, well-figured and of good color, which are now being cut into Veneers.

¶ A visit or correspondence from discriminating buyers of all varieties of fine Imported and Domestic Cabinet Woods in Lumber and Veneer is solicited.

¶ You will not only find the Willey warehouses well stocked with a superb collection of Circassian, Mahogany, Vermilion, Black Walnut and other fancy foreign and domestic lumber and veneers, but buyers are assured of prompt and painstaking service, and a quality of product not usually obtainable.

¶ To visit the plant take Blue Island Ave. car at the postoffice to Robey Street.

C. L. WILLEY, Chicago

Largest Fancy Wood Veneer and Lumber producing plant in the world

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Possibly there is no good reason why YOU were not among these beneficiaries. If it is a matter of eligibility, and you feel that your plant does not at present comply with all requirements, confer with us anyway. Let us see if it cannot be brought up to an acceptable standard at no greater cost than will be justified by the prospective saving on insurance rates.

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Attorney and Manager

1101 R. A. LONG BLDG. KANSAS CITY

active than formerly. Chestnut, good poplar, hickory and some other woods are slow just now, and a surplus in these lines is accumulating, making it probable that light concessions in price will be made from time to time.

ST. LOUIS

The hardwood trade seems to be improving to a slight extent, although not so much as was anticipated some time back. Most of the buying being done is in small order lots, just enough to supply the demand of the retailers. The consumers are also buying in the same way. Neither are stocking up for future requirements. The only exception is the car manufacturers, who are buying rather freely of ash. The furniture factories, too, are coming into the market quite liberally with their orders.

The best item on the list is oak. Ash is also in pretty fair demand. Ash in long lengths and thick oak are in particularly good demand. Prices are being fairly well sustained, although some concessions on oak are reported. The other items remain just about the same as they have been for some time. Cypress is going quite well, but trade is not up to expectations. Orders are small, like those of other hardwoods, but purchasers are coming in freely.

ARKANSAS

Continued heavy rains during the past few weeks have had their effect on Arkansas crops, adding materially to the falling off in yield which had been experienced by reason of the drouth prior thereto. The yield of cotton and other crops will be much less than was promised by the good prospects early in the summer, but the advanced price for which cotton is being sold indicates that the farmers will have a good supply of money this winter with which to do the building as planned, and the lumber market should continue to grow stronger as the season advances. Fortunately, too, Arkansas no longer depends entirely upon the cotton crop. The apple crops and the rice yields are good, and other products of the soil are making fair returns. Only a few sections will be seriously damaged by reason of the loss in cotton production.

The heavy rains, however, have made the logging bad, and many of the hardwood mills which draw from the timbered districts in the bottoms are experiencing considerable difficulty in getting logs to the mills.

MILWAUKEE

One of the most satisfactory features in the local hardwood market is the fact that there is very little price cutting going on this season. Trade is showing steady improvement, while stocks are not especially large and buyers have about come to the conclusion that no more price reductions are to be expected this fall. Receipts of both northern and southern hardwoods are showing some increase, but stocks are not piling up in any line.

Low-grade hardwood is holding especially firm, due to the increased demand for this stock from the local box manufacturers and from other sources. Hardwood flooring is active and the market is firm, with the result that higher prices are looked for in this line. Maple and birch in both upper and low grades seems to be fairly active. Prices on southern hardwoods are a little stronger than they have been, with demand especially good for plain oak.

There is still a disposition on the part of the sash and door manufacturers to buy only enough to meet their present requirements. Stocks on hand at most of the sash and door and interior woodworking plants seem to be rather light, so a better trade from this source is looked for later, as the fall building season makes greater progress. Local furniture manufacturing concerns are meeting with a good business and are placing some good orders for stock, according to wholesalers. Farm implement concerns about the state have met with a good business during the past season, due to the excellent crops harvested in this section of the Northwest, and all are now placing good orders for stock.

A member of the Wisconsin railroad commission reports that there is not the slightest danger of a car shortage in Wisconsin this season, despite the heavy crop movement. The railroads have placed from 5,000 to 10,000 new freight cars in service in this state during the past year, while shippers in various lines have been urged to get through their stocks before the crop rush began.

Although permits were taken out last year for two unusually large structures, one to cost $2,000,000 and the other $1,600,000, building operations in Milwaukee at this time are less than $2,000,000 behind the figures in force a year ago. Investments in building operations during the first nine months of 1913, indicated by figures in the office of the building inspector amounted to $10,054,583, as compared with $11,813,218 for the corresponding period a year ago.

DETROIT

The Detroit hardwood market has been in very good condition the past two weeks. Continued activity in the building lines has kept hardwood dealers busy. Prices have remained high and stationary. "Prices are as firm as the Rock of Gibraltar and there isn't much chance that they will decline, either," said a leading hardwood man. The hardwood flooring trade has continued in prosperous shape and orders and inquiries are plentiful. The box and veneer trades also report a very fair volume of business.

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WANTED

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Kreetan, Mich.

SALESMAN WANTED.

to travel in Michigan, Ohio, Indiana and eastern Illinois. Prefer one who has had experience in this territory and is familiar with the trade, to handle West Virginia band sawed Hardwoods. Address "BOX 104," care HARDWOOD RECORD.

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WANTED—EMPLOYMENT

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200,000 ft. 28" and up White Oak logs.
200,000 ft. 12" and up Walnut logs.
50,000 ft. 12" and up Cherry logs.
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Virgin Timber will be sold at auction by the Ulster Lumber Co., during week of Oct. 20 at Turnwood, Ulster Co., N. Y., together with complete plant of machinery, sawmill, turning factory, inventory; $90,000. Send for catalogue.
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TIMBER ESTIMATES

Estimating Southern timber a specialty. Maps, detailed reports as to stand, quality and logging conditions. Have a few high-class properties for sale. Can furnish best references.

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140 M' 4, 5, 6, 8, 10, 12 and 16/4.
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WANTED

DIMENSION OAK

Plain and Quartered

Various sizes for chair and table factories.

Send to us for specifications and prices.

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New Philadelphia, Ohio

WANTED

Large quantities 1¾x1¾x19 clear oak squares.
THE NORTHERN CHAIR CO.,
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WANTED

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LUMBER WANTED

SOFT MAPLE WANTED

100,000 feet 5/4 Soft Maple, Log Run.
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LUMBER WANTED

Quote delivered Philadelphia, Pa., on
2 cars 8/4 sound wormy & 2 Com. Chestnut.
1 car 4/4 sound wormy & 2 Com. Chestnut.
1 car 6/4 No. 2 Common Poplar.
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Shippers to invoice direct. Name prices on any stock you desire to move.

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5 carloads 10 4x6 and wider 10'—16'.
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We can ship fresh from the saw. Inspect at point of shipment. Terms cash less 2%.

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100,000 feet 4/4 sound wormy Chestnut.
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Will be sold cheap for cash, for immediate shipment.
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YELLOW POPLAR LUMBER CO., Coal Grove, O.

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The estate of J. V. Stevens, recently deceased, left about 1950 Acres of Valuable Timber Lands in Belvidere, Vermont, which is now offered for sale at a low valuation.

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The lowest price ever placed upon this property by Mr. Stevens was $40,000, but the entire property including new Mill, substantially built and up to date, with steam and water power, tenement houses, &c., will be sold for $35,000. Terms, $10,000 down balance easy terms.

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For further particulars, address

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FOR SALE

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Send us specifications and we will quote prices. RAY LUMBER CO., Ray, Maine.

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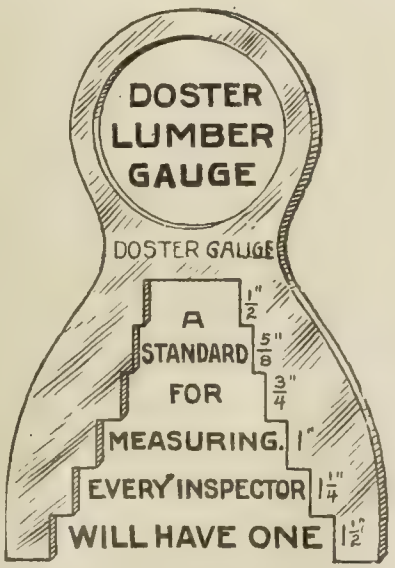
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MISCELLANEOUS

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and all other hardwoods, in all grades and thicknesses, can be readily sold if advertised in the Wanted and For Sale section of HARDWOOD RECORD. If you have a large stock you want to sell try a few lines in this department and see what a lot of inquiries they will bring you



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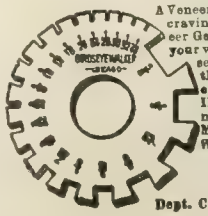
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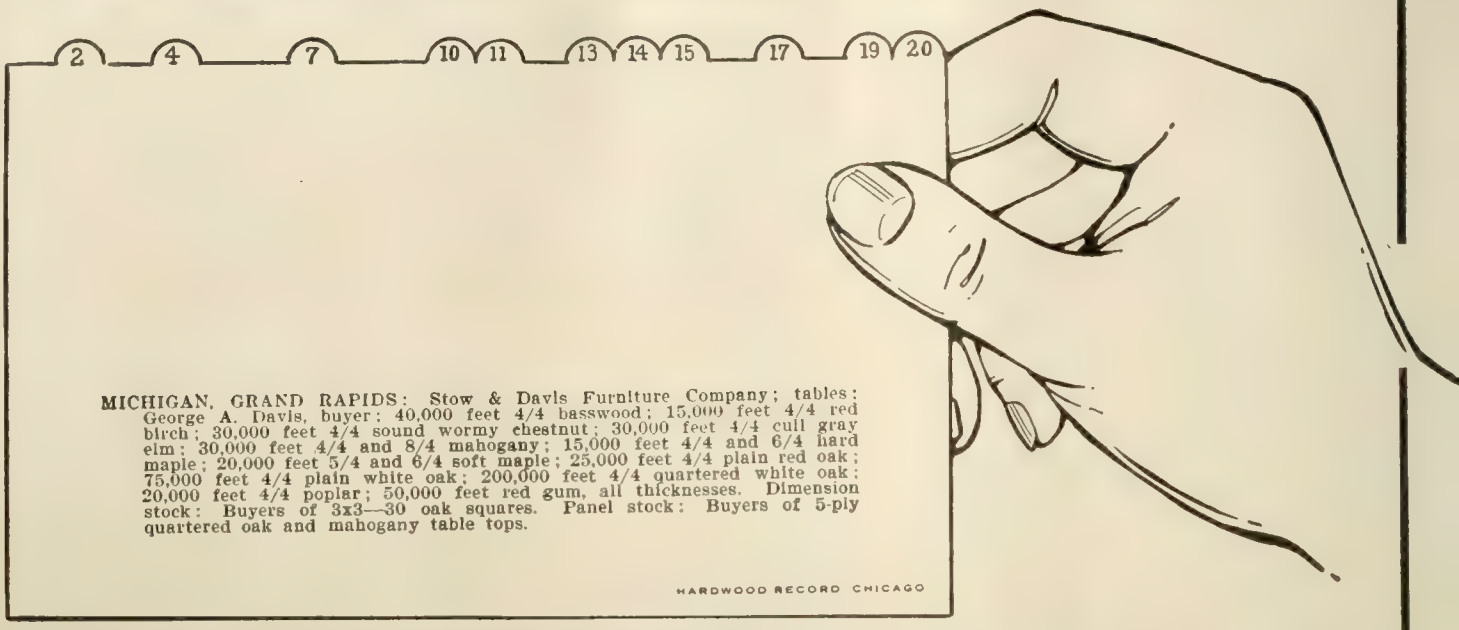
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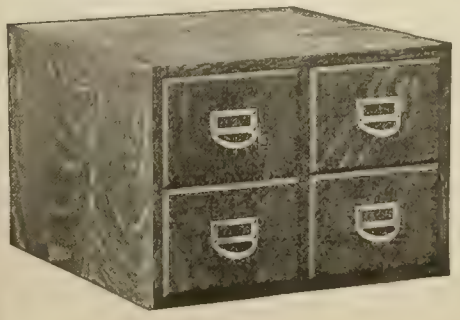


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ILLINOIS

Key

1	Ash	12	Hickory
2	Basswood	13	Mahogany
3	Beech	14	Maple
4	Birch	15	Oak
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8	Cottonwood		
9	Cypress		
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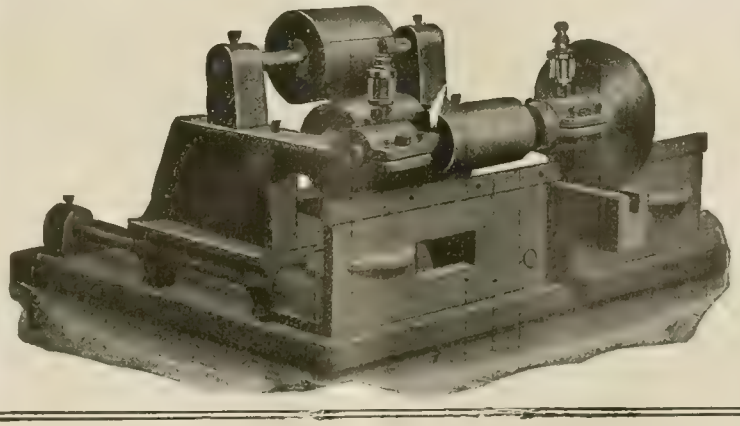
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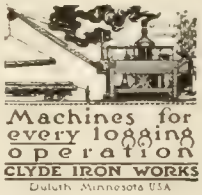
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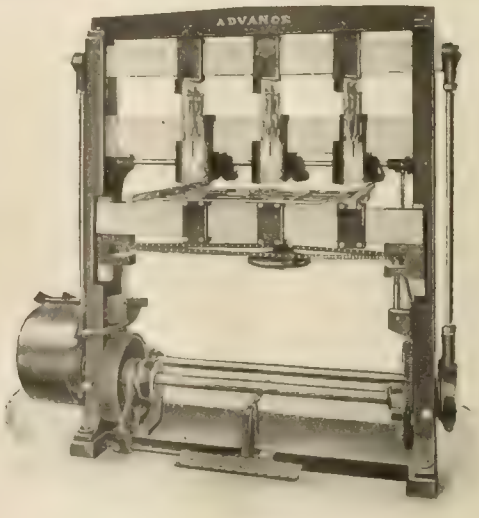
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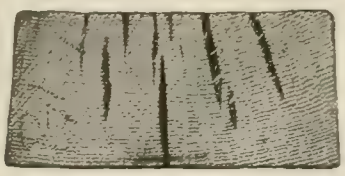
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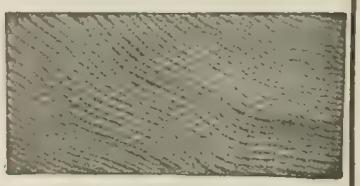


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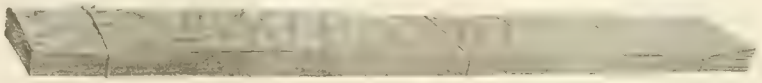
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